THOMSON MULTI MEDIA

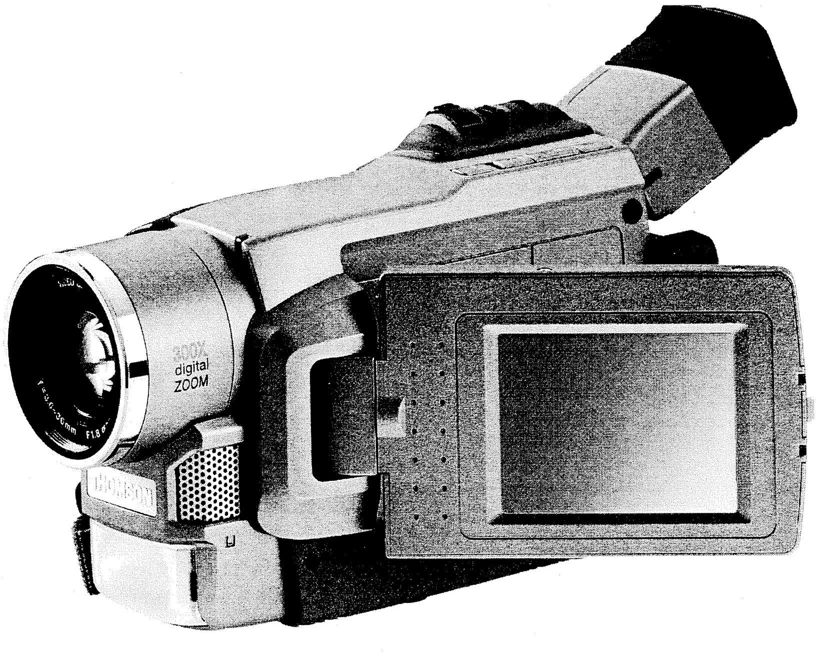
Brandt FERGUSON SABA **TELEFUNKEN** **THOMSON**

VIDEO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

VMD120

CAMESCOPES



VMD120 **THOMSON**

WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 351 603 70 - 0501 / 1,5M - VMD120 Print.

No copying, translation, modification on other use authorized. All rights reserved worldwide. • Tous droits de reproduction, de traduction, d'adaptation et d'exécution réservés pour tous les pays. • Sämtliche Urheberrechte an diesen Texten und Zeichnungen stehen uns zu. Nachdrucke, Vervielfältigungen - auch auszugsweise - nur mit unserer vorherigen Zustimmung zulässig. Alle Rechte vorbehalten. • I diritti di riproduzione, di traduzione, e esecuzione sono riservati per tutti i paesi. • Derechos de reproduccion, de traduccion, de adaptacion y de ejecucion reservados para todos los paises.

SPECIFICATIONS

GENERALS

FORMAT : DV format (SD mode)
STANDARD : PAL
POWER SOURCE : DC 7,2 V (Using battery pack)
DC 11 V (Using AC Power Adapter/Charger)
CONSUMPTION : 4,3 W (LCD monitor off-viewfinder on)
5,3 W (LCD monitor on-viewfinder off)
DIMENSIONS : 83 (W) x 97 (H) x 188 (D) mm
WEIGHT : approx. = 590 g
ACCESSORIES : AC power adapter - Lithium battery - Hand strap - Power cord -
Remote control unit - Remote control battery -
USB cable - S-VIDEO cable - JLIP cable - PC cable - AV cable -

CAMERA SECTION

SENSOR : CCD 1/4"
PIXELS : 800 000
SENSITIVITY : < 1 Lux
ZOOM : 10x - 300x Digital Zoom
LENS : F/1,8 f = 3,6 to 36 mm, 10:1 power zoom lens.
FILTER DIAMETER : filter diameter 37 mm.
WHITE BALANCE : auto / manual adjustment.
LCD MONITOR : 2,5 " black and white LCD
VIEWFINDER : 0,24" black/white LCD

VIDEO RECORDING SECTION

HEAD CONFIGURATION : 2 video head
VIDEO OUTPUT : 1 Vp-p / 75 Ω analogue
DV OUTPUT : 4-pin, IEEE 1394 compliant
AUDIO OUTPUT : 300 mV (ms), 1 kΩ analogue output stereo
S-VIDEO OUTPUT : Y: 1 Vp-p, 75 Ω analogue
C: 0,29 Vp-p 75 Ω analogue
JLIP EDITOR : Ø 3,5 mm, 4 pole
TAPE SPEED : 18,8 mm/s (SP) - 12,5 mm/s (LP)
MAXIMUM RECORDING TIME : 80 min (SP) - 120 min (LP) using 80 min. cassette

MAINS SUPPLY/CHARGER

POWER SOURCE : AC 110 to 240 V ~, 50/60 Hz
OUTPUT : DC 11 V, 1A
DIMENSIONS : 59 (W) x 31 (H) x 84 (D) mm
WEIGHT : approx. 140 g (not including Power Cord)

CONTENTS

2 - MECHANISM ADJUSTMENT
3 - ELECTRICAL ADJUSTMENT

Refer to the Service Manual VMD130/140 Code 351 603 80

Pages

1 - DISASSEMBLY

1.1 BEFORE ASSEMBLY AND DISASSEMBLY 1
1.1.1 Precautions 1
1.1.2 Assembly and disassembly 1
1.1.3 Destination of connectors 1
1.1.4 Disconnection of Connectors (Wires) 1
1.2 JIGS AND TOOLS REQUIRED FOR DISASSEMBLY, ASSEMBLY AND ADJUSTMENT 2
1.2.1 Tools required for adjustments 2
1.3 DISASSEMBLY / ASSEMBLY OF CABINET PARTS AND BOARD ASSEMBLY 2
1.3.1 Disassembly flow chart 2
1.3.2 Disassembly method 3
1.4 MONITOR ASSEMBLY 8
1.4.1 Disassembly/assembly of monitor assembly (for 2,5" type LCD) 8
1.4.2 Disassembly/assembly of hinge assembly (for 2,5" type LCD) 8
1.5 E.VF ASSEMBLY 9
1.5.1 Disassembly/assembly of E.VF assembly (for B/W VF) 9
1.6 DISASSEMBLY/ASSEMBLY OF OP BLOCK ASSEMBLY/CCD BOARD ASSEMBLY 10
1.6.1 Precautions 10
1.6.2 How to remove CCD board assembly and CCD base assembly 10
1.6.3 How to assemble CCD base assembly and CCD board assembly 10
1.6.4 Replacement of Service Repair Parts 10
1.7 EMERGENCY DISPLAY 11
1.8 SERVICE NOTE 12

Pages

4 - CHARTS AND DIAGRAMS

4.1 BOARD INTERCONNECTIONS 13
4.2 VIDEO SYSTEM BLOCK DIAGRAM 15
4.3 SYSCON SCHEMATIC DIAGRAM 19
4.4 PC IF SCHEMATIC DIAGRAM 21
4.5 VTR CPU SCHEMATIC DIAGRAM 23
4.6 MDA SCHEMATIC DIAGRAM 25
4.7 AUDIO SCHEMATIC DIAGRAM 27
4.8 ANR SCHEMATIC DIAGRAM 29
4.9 DV MAIN/1394PHY SCHEMATIC DIAGRAM 31
4.10 DVEQ/DVANA SCHEMATIC DIAGRAM 33
4.11 PRE/REC SCHEMATIC DIAGRAM 35
4.12 V OUT SCHEMATIC DIAGRAM 37
4.13 CAM DSP SCHEMATIC DIAGRAM 39
4.14 OP DRIVE SCHEMATIC DIAGRAM 41
4.15 TG/VDRV SCHEMATIC DIAGRAM 43
4.16 REG SCHEMATIC DIAGRAM 45
4.17 MONITOR SCHEMATIC DIAGRAM 47
4.18 LCD BL SCHEMATIC DIAGRAM 49
4.19 CCD SCHEMATIC DIAGRAM 51
4.20 JUNCTION SCHEMATIC DIAGRAM 52
4.21 VF SCHEMATIC DIAGRAM 53
4.22 JACK SCHEMATIC DIAGRAM 54
4.23 ZOOM UNIT SCHEMATIC DIAGRAM 55
4.24 MAIN CIRCUIT BOARD 57
4.25 MONITOR CIRCUIT BOARD 63
4.26 LCD BL CIRCUIT BOARD 65
4.27 CCD AND JUNCTION CIRCUIT BOARDS 67
4.28 JACK CIRCUIT BOARD 69
4.29 VOLTAGE CHARTS 71
4.30 POWER SYSTEM BLOCK DIAGRAM 75
4.31 REGULATOR SYSTEM BLOCK DIAGRAM 77
4.33 AUDIO SYSTEM BLOCK DIAGRAM 79

SECTION 1
DISASSEMBLY

1.1 BEFORE ASSEMBLY AND DISASSEMBLY

1.1.1 Precautions

1. Be sure to remove the power supply unit prior to mounting and soldering of parts.
2. When removing a component part that needs to disconnect the connector and to remove the screw for removing itself, first disconnect the connecting wire from the connector and then remove the screw beforehand.
3. When connecting and disconnecting the connectors, be careful not to damage the wire.
4. Carefully remove and handle the part to which some spacer or shield is attached for reinforcement or insulation.
5. When replacing chip parts (especially IC parts), desolder completely first (to prevent peeling of the pattern).
6. Tighten screws properly during the procedures.
   Unless specified otherwise, tighten screws at a torque of 0.069N¥m(0.7kgf¥cm).

1.1.2 Assembly and disassembly

STEP No.	PART	Fig.No.	POINT	NOTE
1	COVER(ZOOM) ASSY	Fig.1-3-1	(S①a), (S①b), 2(L①a), 2(L①b)	-
2	UPPERCASE ASSY (Inc.E.VF UNIT (B/W,COLOR), SPEAKER/ MONITOR)	Fig.1-3-2	(S②a), (S②b), (L②), (S②c) 2(S②a), (S②d), 4(S②a) CAP(DC JACK) ☆CN (2a)	NOTE 2

(1) (2) (3) (4) (5)

(1) Indicate the disassembly steps. When assembling, perform in the reverse order of these steps. This number corresponds to the number in the disassembly diagram.
(2) Indicates the name of disassembly/assembly parts.
(3) Indicates the number in the disassembly diagram.
(4) Indicates parts and points such as screws, washers, springs which must be removed during disassembly/assembly.

Symbol	Name, Point
S	Screw
L	Lock, Pawl, Hook
SD	Soldering
☆(Others)	Connector, Cover, Bracket, etc.

(Example)

¥2 (S1) : Remove the two screws (S1) for removing the part 1.
¥CN(2a): Disconnect the connector (2a).
¥SD1 : Unsolder at the point SD1.

(5) Precautions on disassembly/assembly.

1.1.3 Destination of connectors

Note: ***Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.***

↔ : Wire
⇔ : Flat wire
➡ : Board to Board connector

[Example]

Note: *Remove the parts marked in .*

CONN. No.	CONNECTOR				Pin No.
(2a)	MAIN	CN101	⇔	MONITOR CN761	40

1.1.4 Disconnection of Connectors (Wires)

Connector

Pull both ends of the connector in the arrow direction, remove the lock and disconnect the flat wire.

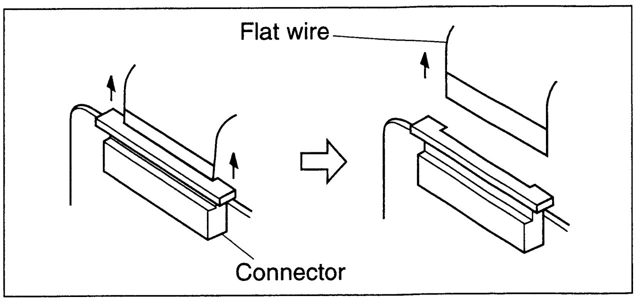


Fig. 1-1-1 Connector 1

Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.

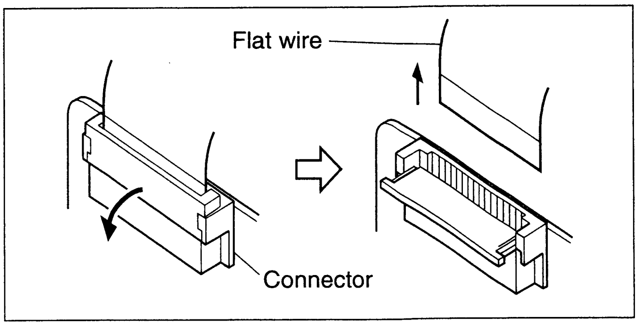


Fig. 1-1-2 Connector 2

B-B connector

Pull the board by both the sides in the direction of the arrow for disconnecting the B-B connector.

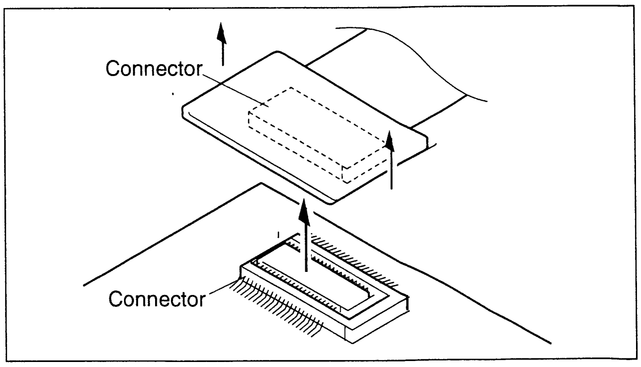


Fig. 1-1-3 Connector 3

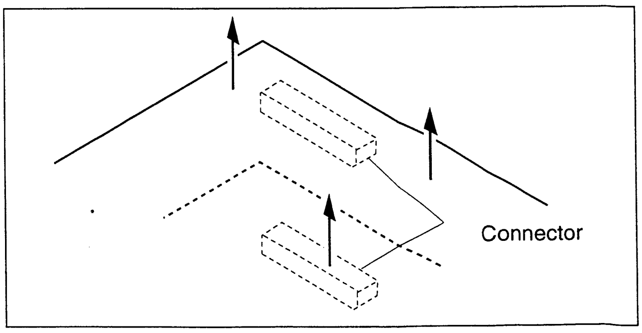


Fig. 1-1-4 Connector 4

1.2 JIGS AND TOOLS REQUIRED FOR DISASSEMBLY, ASSEMBLY AND ADJUSTMENT

1.2.1 Tools required for adjustments

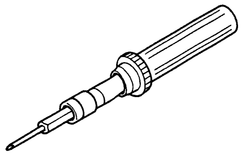
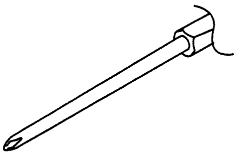
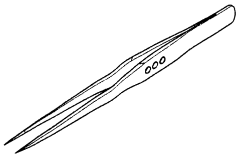
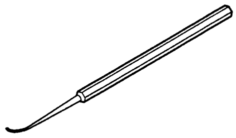
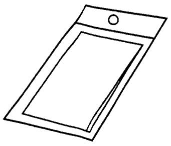
1 Torque Driver 35027200	2 Bit 35081460
	
3 Tweezers	4 Chip IC Replacement Jig 10361310
	
5 Cleaning Cloth	
	

Table 1-2-1

1. **Torque driver**
   Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
2. **Bit**
   This bit is slightly longer than those set in conventional torque drivers.
3. **Tweezers**
   To be used for removing and installing parts and wires.
4. **Chip IC replacement jig**
   To be used for adjustment of the camera system.
5. **Cleaning cloth**
   Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

1.3 DISASSEMBLY/ASSEMBLY OF CABINET PARTS AND BOARD ASSEMBLY

1.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and board assembly in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order.

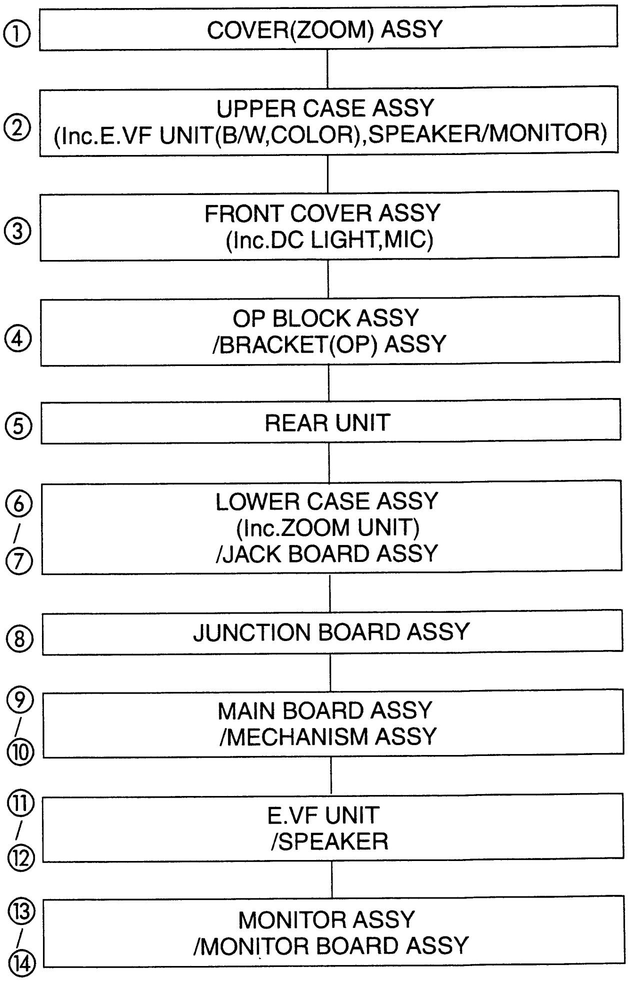

① COVER(ZOOM) ASSY
② UPPER CASE ASSY (Inc.E.VF UNIT(B/W,COLOR),SPEAKER/MONITOR)
③ FRONT COVER ASSY (Inc.DC LIGHT,MIC)
④ OP BLOCK ASSY /BRACKET(OP) ASSY
⑤ REAR UNIT
⑥/⑦ LOWER CASE ASSY (Inc.ZOOM UNIT) /JACK BOARD ASSY
⑧ JUNCTION BOARD ASSY
⑨/⑩ MAIN BOARD ASSY /MECHANISM ASSY
⑪/⑫ E.VF UNIT /SPEAKER
⑬/⑭ MONITOR ASSY /MONITOR BOARD ASSY

Table 1-3-1

1.3.2 Disassembly method

STEP No.	PART	Fig.No.	POINT	NOTE
①	COVER(ZOOM) ASSY	Fig.1-3-1	(S①a), (S①b), 2(L①a), 2(L①b)	-
②	UPPER CASE ASSY (Inc.E.VF UNIT (B/W,COLOR), SPEAKER/ MONITOR)	Fig.1-3-2	(S②a), (S②b), (L②), (S②c) 2(S②a), (S②d), 4(S②a) CAP(DC JACK) ☆CN (2a)	NOTE②
③	FRONT COVER ASSY (Inc.DC LIGHT,MIC)	Fig.1-3-3	COVER(JACK),3(S③),(L③a) (L③b,☆CN (3a)	NOTE③a NOTE③b
④	OP BLOCK ASSY /BRACKET(OP) ASSY	Fig.1-3-4	☆CN (4a),(4b) 2(S④), 2(L④)	-
⑤	REAR UNIT	Fig.1-3-5	☆CN (5a) 4(S⑤)	NOTE⑤
⑥ /	LOWER CASE ASSY (Inc.ZOOMUNIT)	Fig.1-3-6	☆CN (6a),(6b),(6c) (S⑥a), 2(S⑥b), 2(S⑥c) (L⑥a), (L⑥b)	-
⑦	JACK BOARD ASSY		(S⑦)	NOTE⑦
⑧	JUNCTIONBOARD ASSY	Fig.1-3-7	☆CN (8a), (8b), (8c) 2(S⑧),☆CN (8d)	NOTE⑧a NOTE⑧b
⑨ / ⑩	MAIN BOARDASSY /MECHANISM ASSY	Fig.1-3-8	(S⑨a),(L⑨a),SHIELD PLATE ☆CN (9a), (9b), (9c) 2(S⑨b),(L⑨b),(L⑨c)	-
⑪ /	E.VF UNIT	Fig.1-3-9	☆CN (11a) (S⑪a),(S⑪b) (L⑪)	NOTE⑪a NOTE⑪b
⑫	SPEAKER		(S⑫),PLATE(SPK) ☆CN (12a)	-
⑬ /	MONITOR ASSY	Fig.1-3-10	2(S⑬a),COVER(HINGE) ☆CN (13a),2(S⑬b)	NOTE⑬
⑭	MONITOR BOARD ASSY		3(S⑭),(L⑭)	NOTE⑭a NOTE⑭b

Table 1-3-2

NOTE ② : *Remove the CAP (DC JACK) before removing these parts .*

NOTE ③ a : *As it is difficult to remove (L ③b), remove the F. COVER ASSY by lowering it.*

NOTE ③ b : *Be careful not to damage any parts.*

Particularly, take care not to scratch or stain the lenses.

NOTE ⑤ : *As screw No. 19 is hidden behind the cassette cover, open the cassette cover to enable removal of the screw.*

NOTE ⑦ : *As screw No. 27 is hidden behind the cassette cover, open it before removing the screw.*

NOTE ⑧ a : *As the CN572 is located at the back of the assembly, unplug the three connectors and remove the screws before disconnecting the CN572.*

NOTE ⑧ b : *Be careful not to damage any of the switches.*

NOTE ⑪ a : *To remove the unit, unlock the connector and pull out the unit together with the FPC.*

NOTE ⑪ b : *When removing the unit, insert the FPC into the gap.*

NOTE ⑬ : *When reassembling the MONITOR ASSY, be careful not to damage any of the parts.*

NOTE ⑭ a : *To remove the assembly, pull the memory card out in advance. (MMC compatible models only)*

NOTE ⑭ b : *Be careful not to damage any of the parts.*
SW KNOB(DC LIGHT: Gray)

Note: *Remove the parts marked in* .

CONN. No.	CONNECTOR						Pin No.
(2a)	MAIN	CN101	⇔	MONITOR		CN761	40
(3a)	MAIN	CN106	↔	MIC		—	3
(4a)	MAIN	CN107	⇔	CCD		—	20
(4b)	MAIN	CN108	⇔	OP BLOCK ASSY		—	24
(5a)	MAIN	CN104	↔	REAR UNIT		CN1	10
(6a)	MAIN	CN109	⇔	ZOOM UNIT		—	15
(6b)	MAIN	CN102	↔	JACK		CN501	9
(6c)	JACK	CN502	⇔	MAIN		CN103	14
(8a)	JUNCTION	CN571	⇔	MAIN		CN113	34
(8b)	JUNCTION	CN574	⇔	LOADING MOTOR		—	6
(8c)	JUNCTION	CN573	⇔	DRUM MOTOR		—	11
(8d)	JUNCTION	CN572	⇔	SENSOR		—	15
(9a)	MAIN	CN110	⇔	HEAD		—	8
(9b)	MAIN	CN112	⇔	CAPSTAN MOTOR		—	18
(9c)	MAIN	CN111	⇔	ROTARY ENCODER		—	6
(11a)	MONITOR	CN763	⇔	E.VF UNIT(C_B/W)		CN721/CN751	20
(12a)	MONITOR	CN765	↔	SPEAKER		—	2
(13a)	MONITOR	CN764	⇔	LCD BL		CN751	33/32

Table 1-3-3

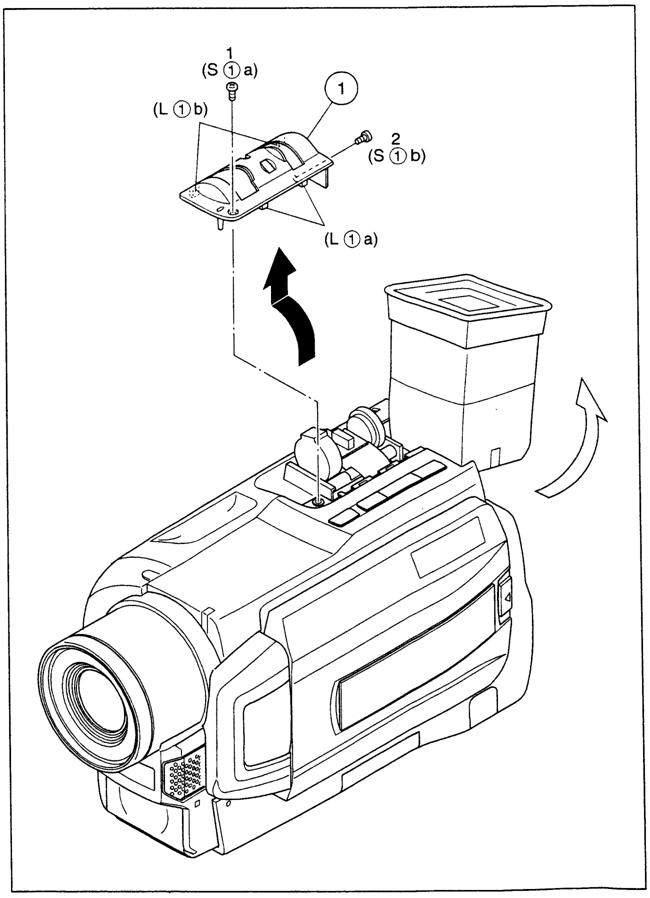


Fig. 1-3-1

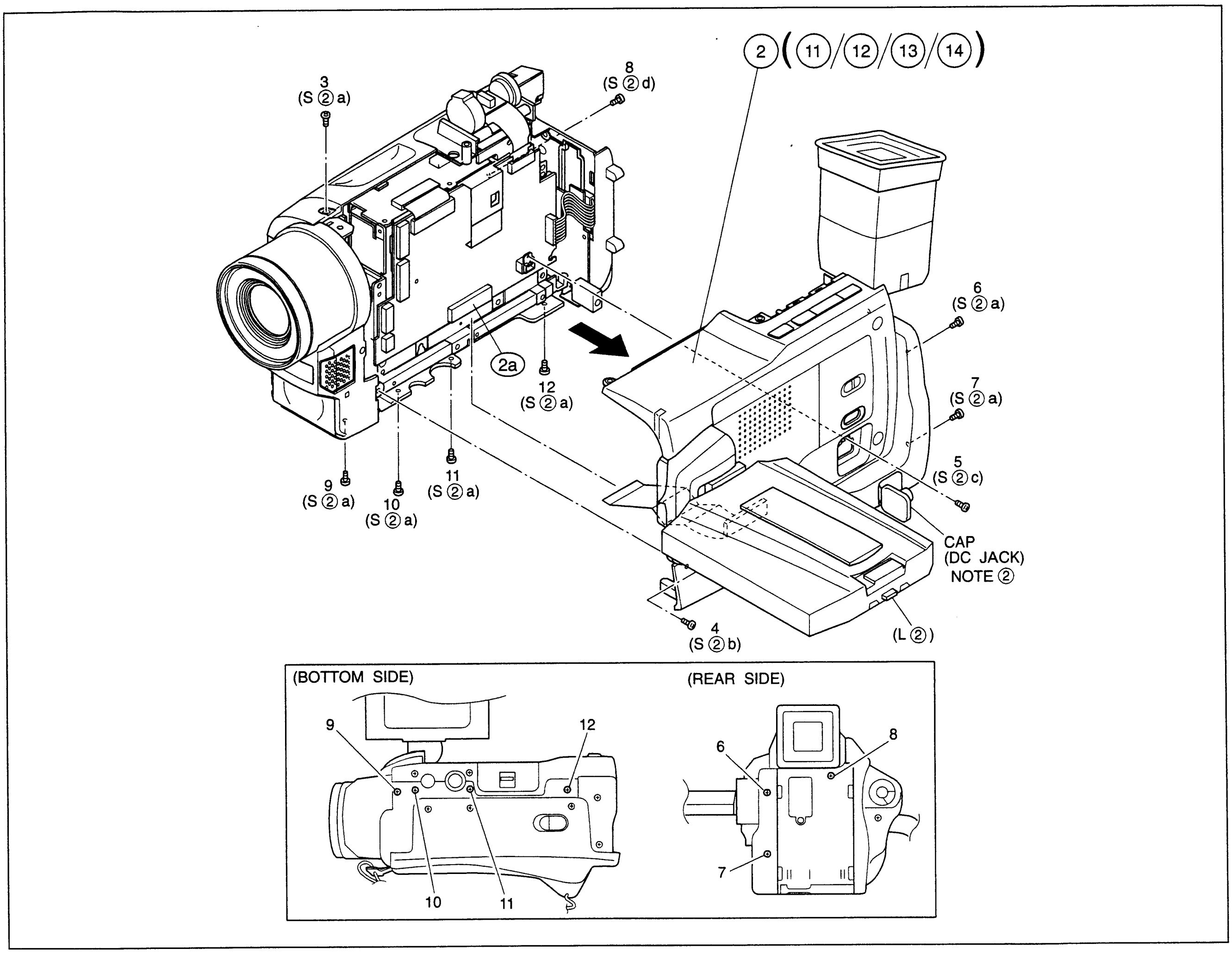

②(⑪/⑫/⑬/⑭)
3 (S ② a)
8 (S ② d)
6 (S ② a)
7 (S ② a)
5 (S ② c)
2a
12 (S ② a)
9 (S ② a)
10 (S ② a)
11 (S ② a)
CAP (DC JACK) NOTE ②
(L ②)
4 (S ② b)
(BOTTOM SIDE)
9
12
10
11
(REAR SIDE)
6
8
7

Fig. 1-3-2

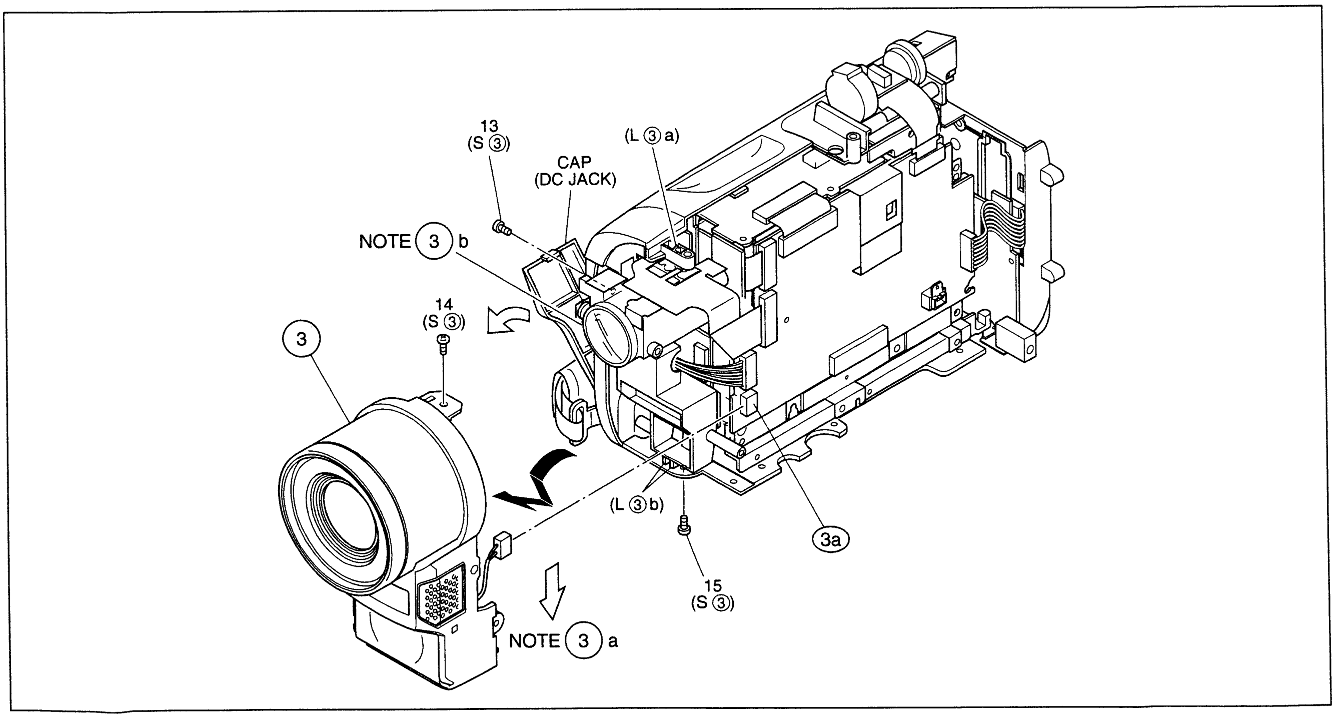

13 (S ③)
(L ③ a)
CAP (DC JACK)
NOTE ③ b
14 (S ③)
③
(L ③ b)
3a
15 (S ③)
NOTE ③ a

Fig. 1-3-3

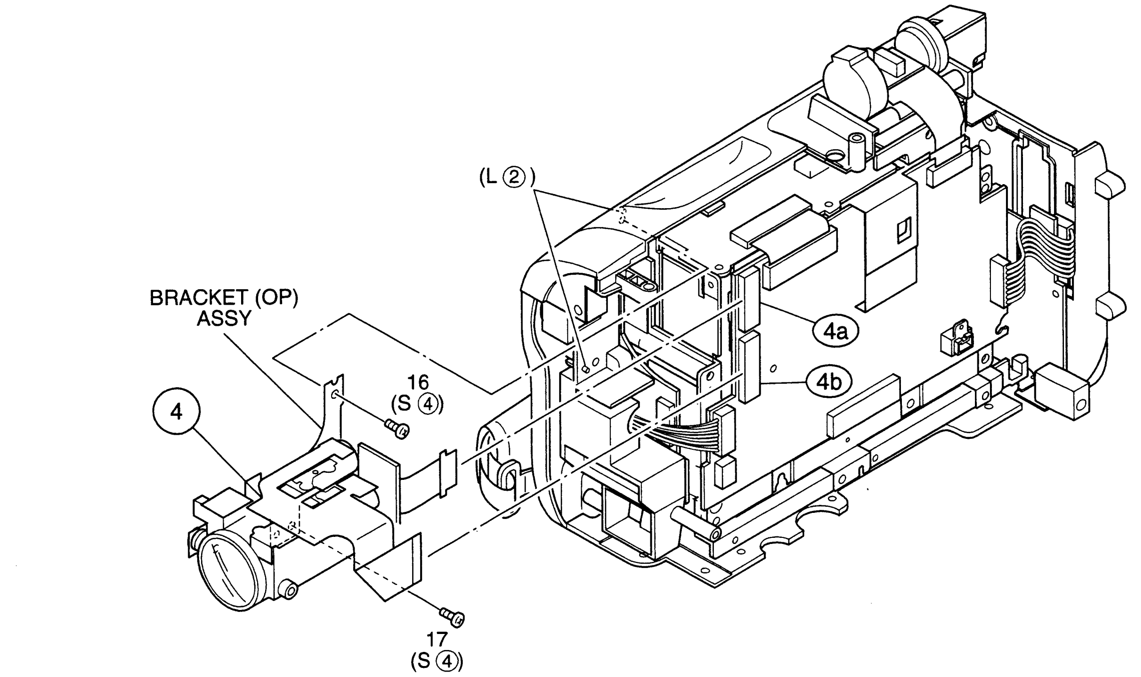

(L②)
BRACKET (OP)
ASSY
④
16
(S④)
4a
4b
17
(S④)

Fig. 1-3-4

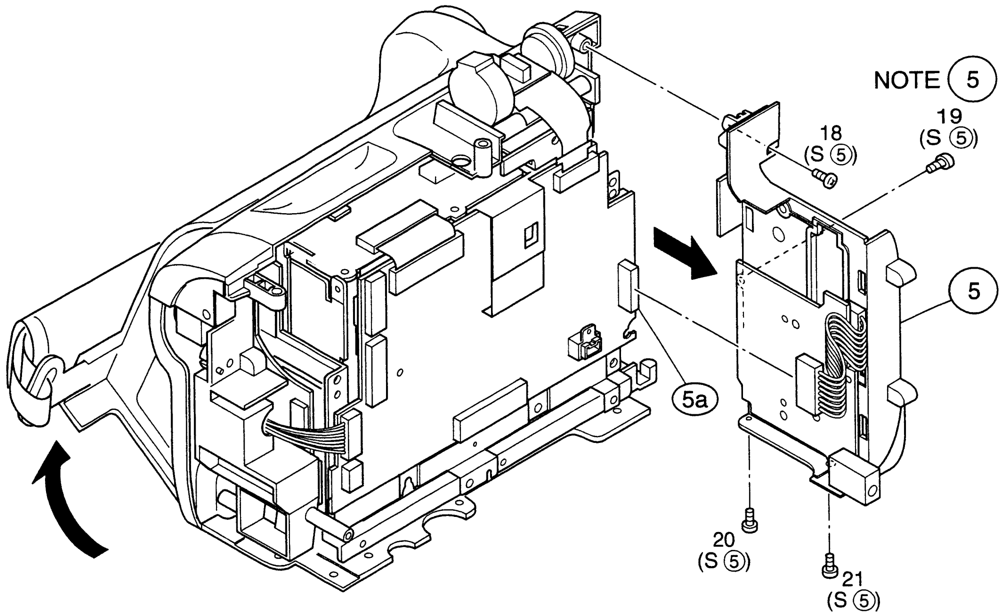

NOTE ⑤
18
(S⑤)
19
(S⑤)
⑤
5a
20
(S⑤)
21
(S⑤)

Fig. 1-3-5

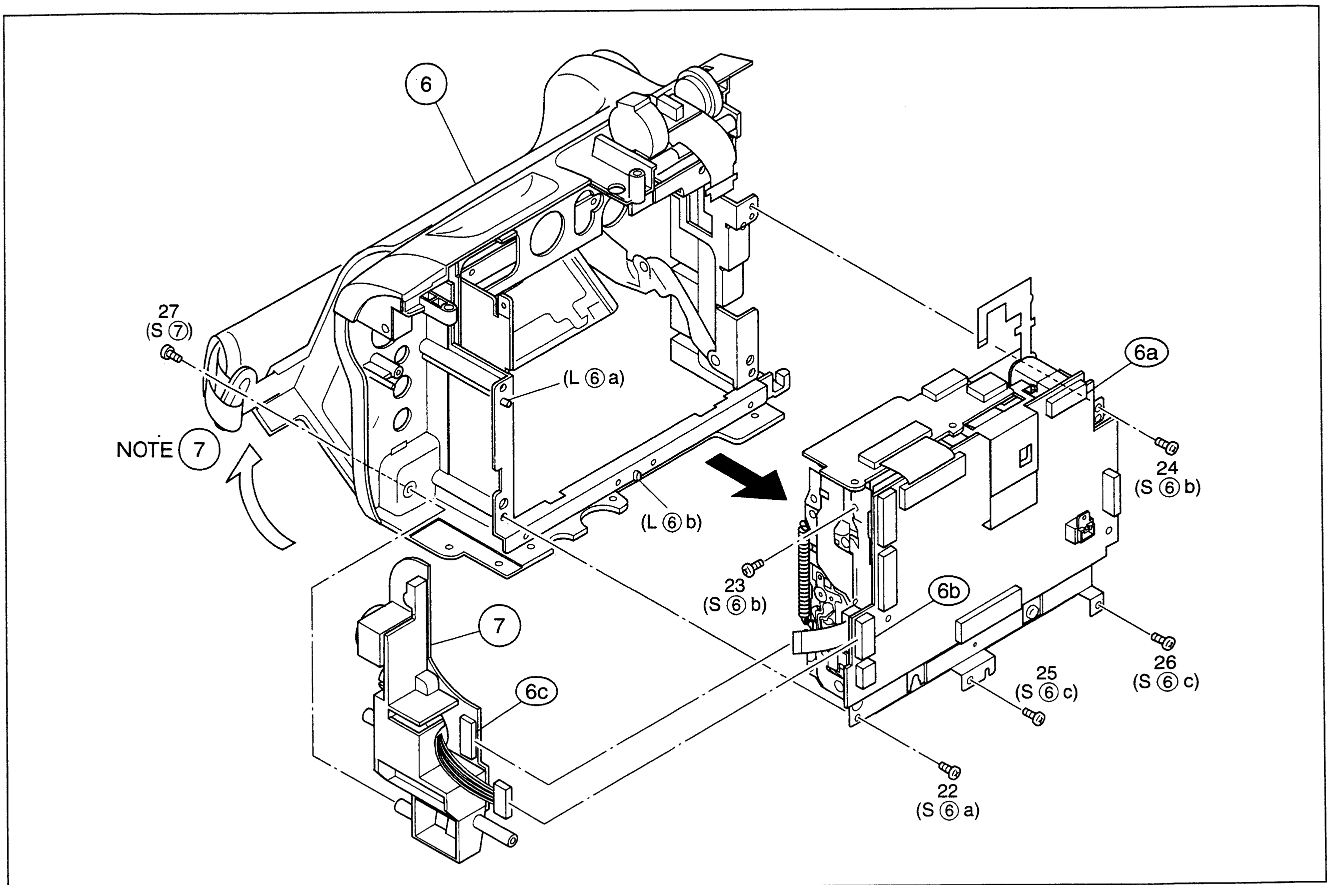

⑥
27
(S ⑦)
(L ⑥ a)
6a
NOTE ⑦
24
(S ⑥ b)
(L ⑥ b)
23
(S ⑥ b)
6b
⑦
6c
25
(S ⑥ c)
26
(S ⑥ c)
22
(S ⑥ a)

Fig. 1-3-6

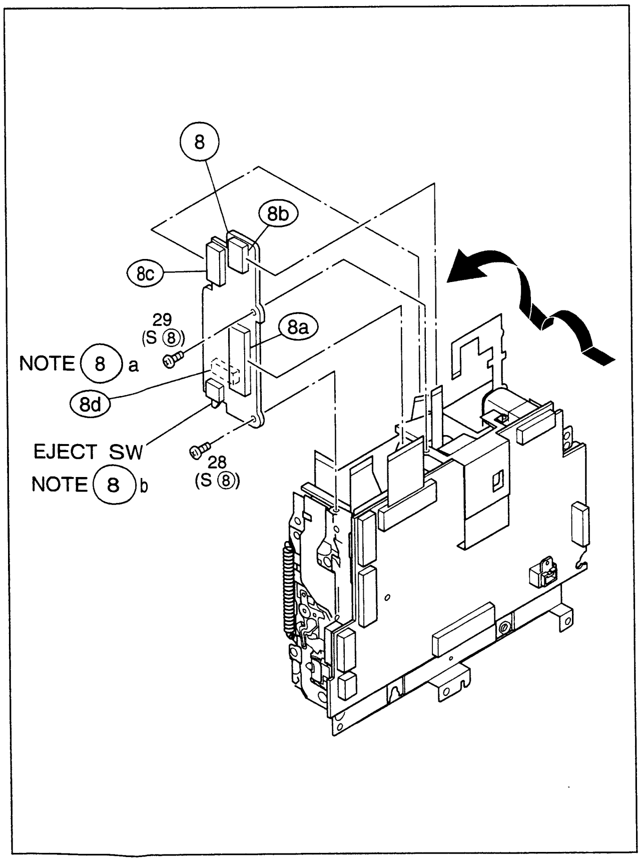

⑧
8b
8c
29
(S ⑧)
8a
NOTE ⑧ a
8d
EJECT SW
NOTE ⑧ b
28
(S ⑧)

Fig. 1-3-7

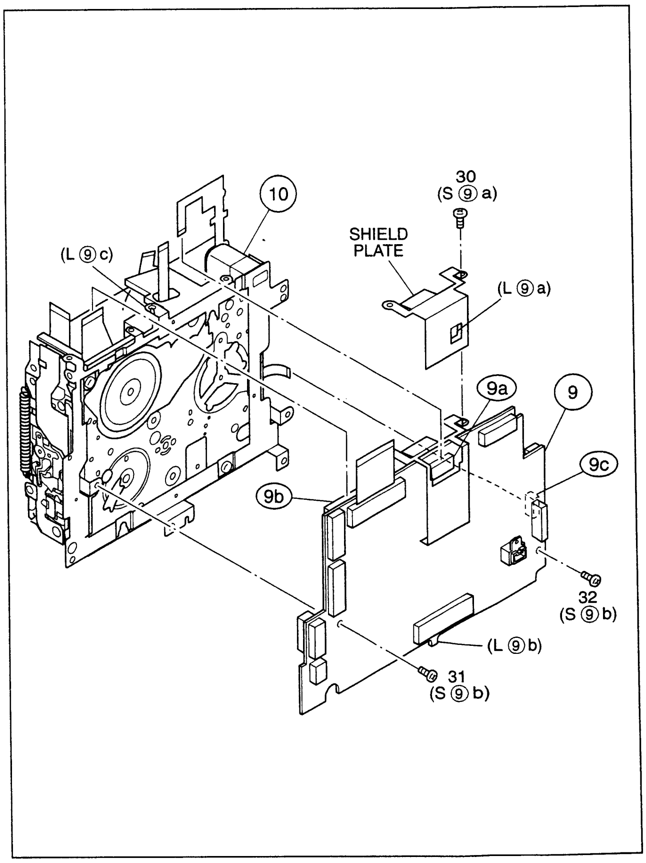

⑩
30
(S ⑨ a)
SHIELD
PLATE
(L ⑨ c)
(L ⑨ a)
9a
⑨
9c
9b
32
(S ⑨ b)
(L ⑨ b)
31
(S ⑨ b)

Fig. 1-3-8

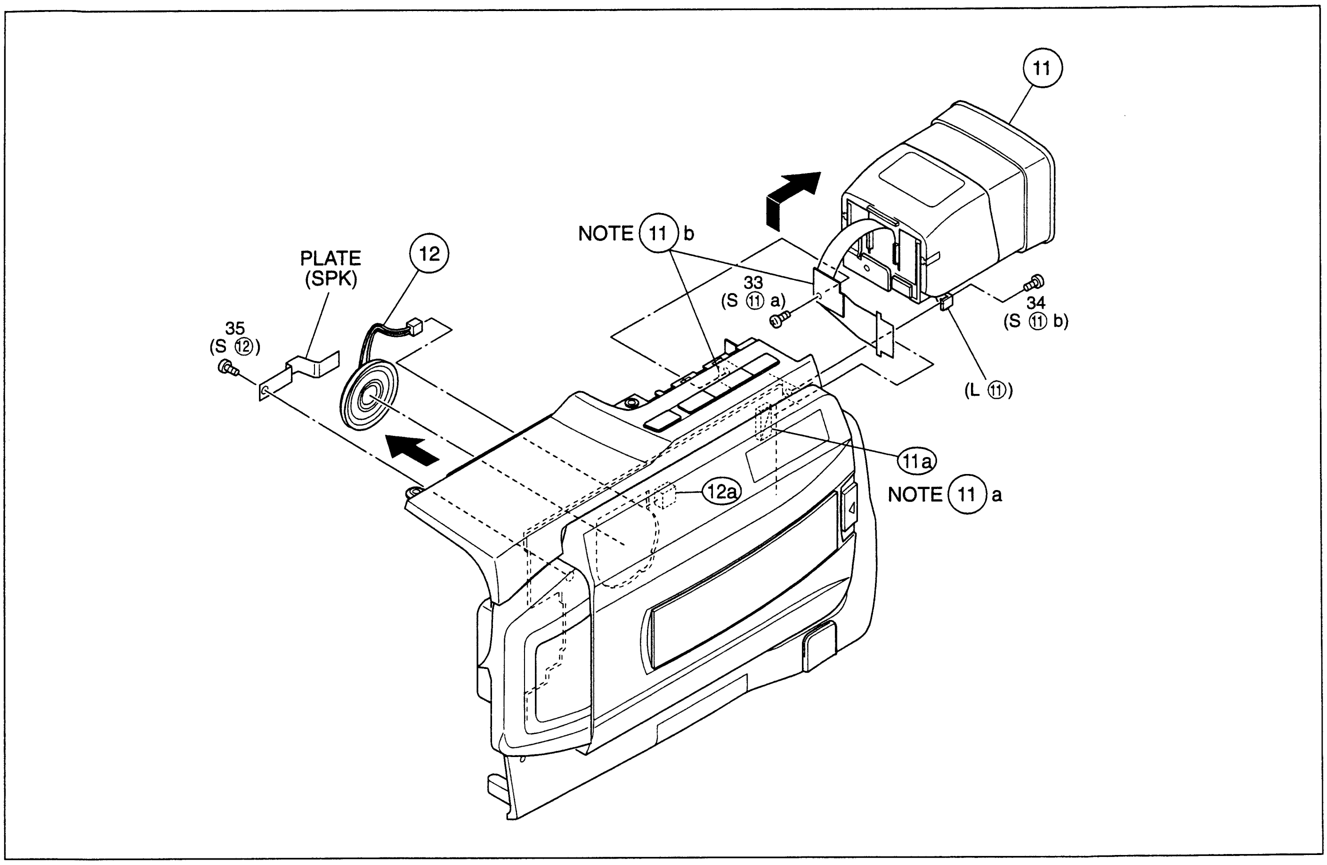
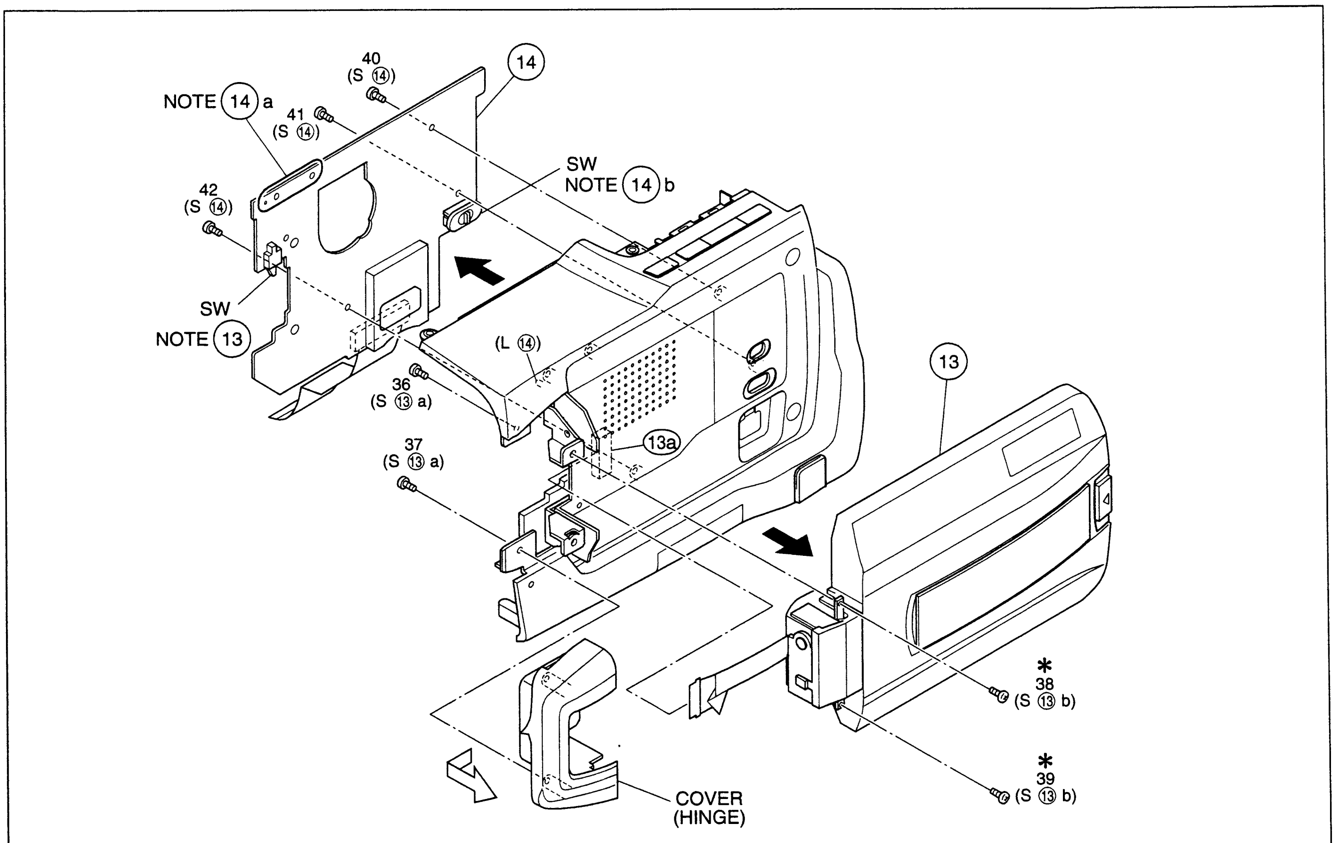

⑪
NOTE ⑪ b
PLATE
(SPK)
⑫
33
(S ⑪ a)
34
(S ⑪ b)
35
(S ⑫)
(L ⑪)
⑪a
NOTE ⑪ a
⑫a

Fig. 1-3-9


40
(S ⑭)
⑭
NOTE ⑭ a
41
(S ⑭)
SW
NOTE ⑭ b
42
(S ⑭)
SW
NOTE ⑬
(L ⑭)
⑬
36
(S ⑬ a)
⑬a
37
(S ⑬ a)
*
38
(S ⑬ b)
*
39
(S ⑬ b)
COVER
(HINGE)

*: 0.147N.m (1.5kgf.cm)

Fig. 1-3-10

1.4 ⑬ MONITOR ASSEMBLY

Note: *The shape of the monitor assembly varies by the size of the LCD screen.*
For the 2.5 -type LCD, refer to Fig. 1-4-1.

1.4.1 Disassembly/assembly of monitor assembly (for 2.5"-type LCD)

Note: *Be careful not to soil or scratch the monitor screen through the disassembly/assembly work.*

1. Remove the four screws 1 to 4 in numerical order. While disengaging the six hooks (L⑬a to L⑬f) in alphabetical order, remove the monitor cover assembly.
2. Unlock the connector a and then disconnect the FPC while lifting the hinge assembly upwards to remove it together with the FPC.

Note⑬a: *For disconnecting the FPC, unlock the connector first and then lift the hinge assembly upwards. Accordingly, the FPC is disconnected together with the hinge assembly.*
Note⑬b: *Treat the wires carefully.*

3. Unplug the wires and FPCs from the two connectors ⓑ, ⓒ, and then remove the MONITOR BL board assembly, holder (PWB) and backlight in that order.
4. Remove the LCD module.

1.4.2 Disassembly/assembly of hinge assembly (for 2.5"-type LCD)

1. Remove the three screws (5 to 7), and then remove the hinge covers (1) and (2) by disengaging a total of four hooks (L⑬g, L⑬h) at the two sides.
2. Separate the SW board assembly and the FPC from the hinge assembly.

Note ⑬c: *When connecting the FPC, arrange the FPC wire by winding it around the shaft (hinge pin) of the hinge assembly by two and a half turns while paying heed to the orientation of the hinge assembly and FPC.*

Note ⑬d: *When disassembling/assembling the hinge assembly, pay careful attention to every part not to damage anything.*

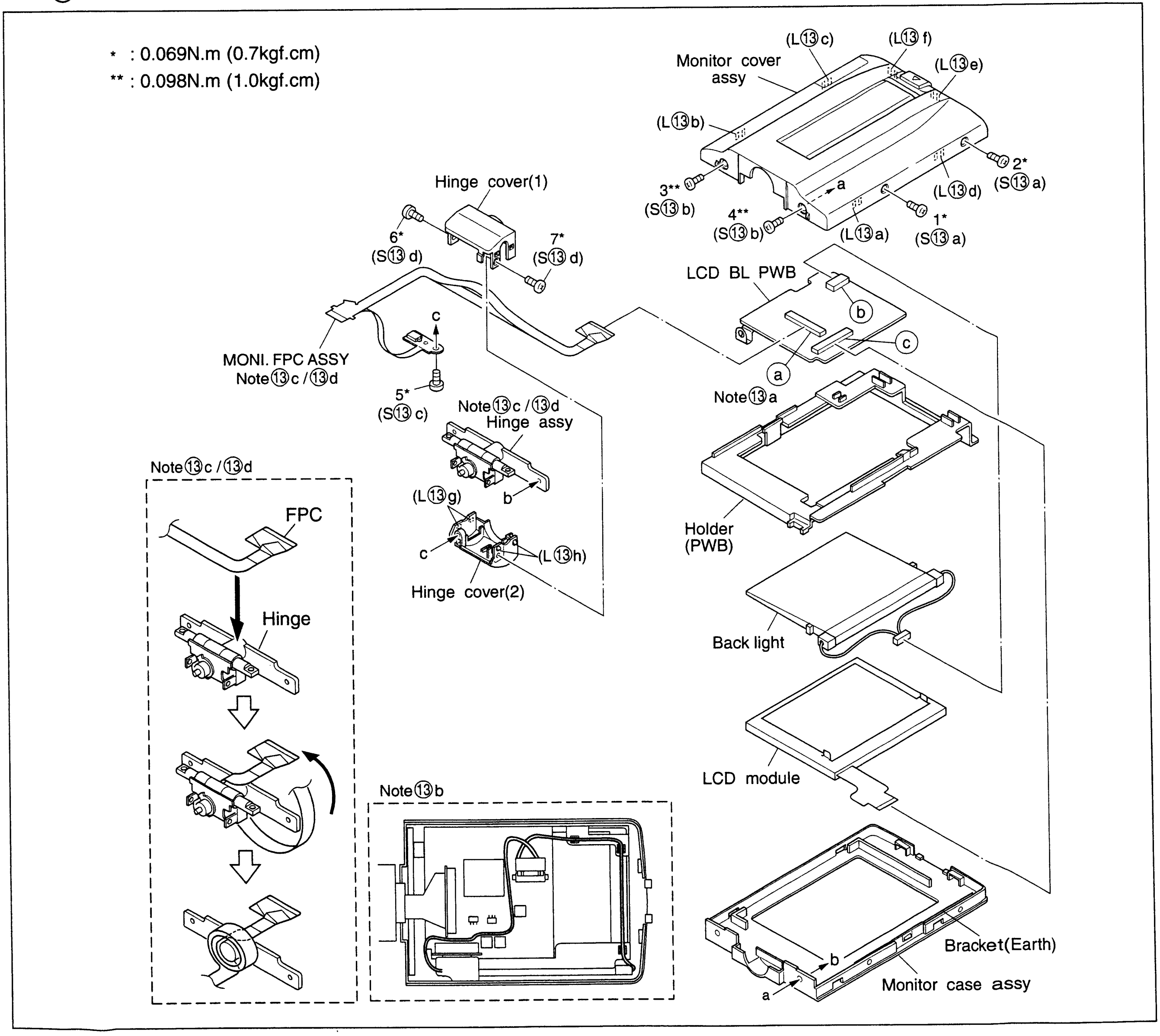

* : 0.069N.m (0.7kgf.cm)
** : 0.098N.m (1.0kgf.cm)
(L⑬c)
(L⑬f)
Monitor cover assy
(L⑬e)
(L⑬b)
2*
(S⑬a)
3**
(S⑬b)
a
(L⑬d)
4**
(S⑬b)
(L⑬a)
1*
(S⑬a)
Hinge cover(1)
6*
(S⑬d)
7*
(S⑬d)
LCD BL PWB
ⓑ
c
ⓒ
MONI. FPC ASSY
Note⑬c / ⑬d
ⓐ
5*
(S⑬c)
Note⑬c / ⑬d
Hinge assy
Note⑬a
Note⑬c / ⑬d
FPC
(L⑬g)
b
c
(L⑬h)
Holder (PWB)
Hinge cover(2)
Hinge
Back light
LCD module
Note⑬b
Bracket(Earth)
b
Monitor case assy
a

Fig. 1-4-1

1.5 ⑪ E. VF ASSEMBLY

Note: *The shape of the E. VF assembly varies by the type of the viewfinder (B/W, color VF).*
(For the B/W VF, refer to Fig. 1-5-1)

1.5.1 Disassembly/assembly of E. VF assembly (for B/W VF)

1. Remove the two screws (1, 2) and the eyepiece assembly while disengaging the hook (L ⑪ a).
2. Remove the two screws (3, 4). And spread one side of the top case sub-assembly to disengage the hooks (L ⑪ b, L ⑪ c) that are located at both sides of the top case sub-assembly, then remove the top case sub-assembly.

Note ⑪ a: *When removing the top case sub-assembly, peel off or unplug the FPC that is bonded to the sub-assembly.*

Note ⑪ b: *When reassembling the top case sub-assembly, be careful not to catch the FPC between any of the parts.*

3. Remove the screw (5) and then remove the LCD assembly.

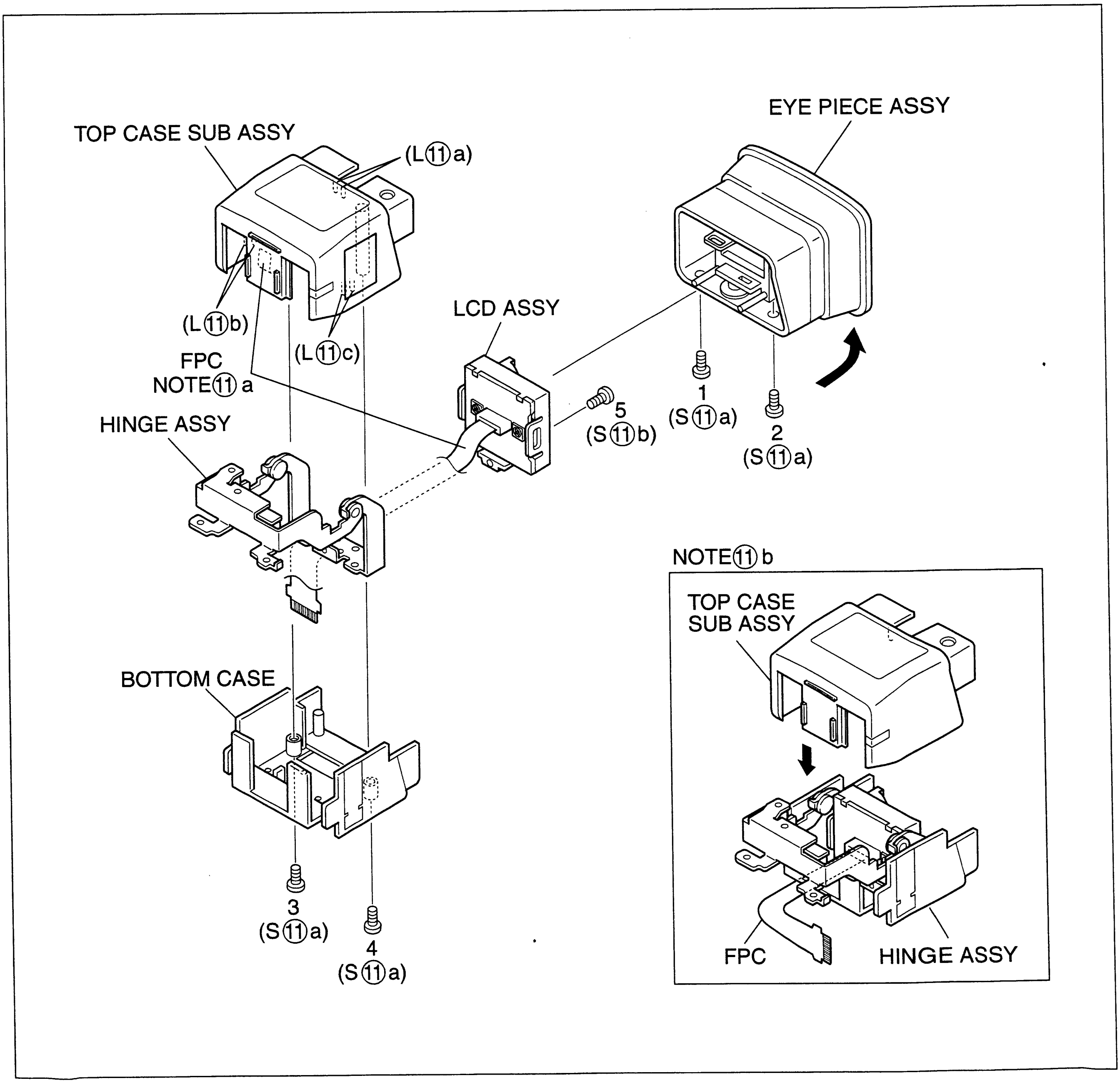

TOP CASE SUB ASSY
(L⑪a)
EYE PIECE ASSY
(L⑪b)
(L⑪c)
FPC
NOTE⑪ a
LCD ASSY
HINGE ASSY
5
(S⑪b)
1
(S⑪a)
2
(S⑪a)
BOTTOM CASE
3
(S⑪a)
4
(S⑪a)
NOTE⑪ b
TOP CASE
SUB ASSY
FPC
HINGE ASSY

Fig. 1-5-1

1.6 DISASSEMBLY/ASSEMBLY OF OP BLOCK ASSEMBLY/CCD BOARD ASSEMBLY

1.6.1 Precautions

1. Take care in handling the CCD image sensor, optical LPF and lens components when performing maintenance etc., especially with regard to surface contamination, attached dust or scratching. If fingerprints are present on the surface they should be wiped away using either a silicon paper, clean chamois or the cleaning cloth.
2. The CCD image sensor may have been shipped with a protective sheet attached to the transmitting glass. When replacing the CCD image sensor, do not peel off this sheet from the new part until immediately before it is mounted in the OP Block Assembly.
3. The orientation of the optical LPF is an important factor for installation. If there is some marking on the LPF, be sure to note it down before removing and to reassemble it very carefully as it was referring to the marking.

1.6.2 How to remove CCD board assembly and CCD base assembly

1. Unsolder the CCD board assembly by the 14 points (SD1) and then remove it.
2. Remove the two screws (1, 2) and remove the CCD base assembly.

Note ④ a: *When removing the CCD base assembly, pay heed to the CCD image sensor because the spacer rubber and optical LPF are occasionally removed together with the CCD image sensor.*

Note ④ b: *When replacing the CCD image sensor, don t replace it individually but replace the CCD base assembly in whole with a new one.*

1.6.3 How to assemble CCD base assembly and CCD board assembly

1. Install the optical LPF with the spacer rubber attached to its CCD side in the OP block assembly.

Note ④ c: *Pay careful attention to the orientation of the LPF.*

2. Set the CCD base assembly with careful attention to the spacer rubber not to come off the right position, and fasten them together with the two screws (1, 2).
3. Set the CCD board assembly in the CCD base assembly, and then solder it by the 14 points (SD1).

1.6.4 Replacement of Service Repair Parts

The service repair parts for the OP Block Assembly are as listed below.

Before replacement of these parts, remove the bracket (OP assembly) as required.

Take special care not to disconnect any of the FPC wires or cause any damage due to soldering (excessive heating).

1. Focusing motor
2. Zoom motor
3. Iris motor unit

Note ④ d: *When replacing the focusing motor or the zoom motor, solder the FPC at a space of about 1 mm above the terminal pin.*

Note ④ e: *The iris motor unit includes the FPC Assembly and two sensors.*

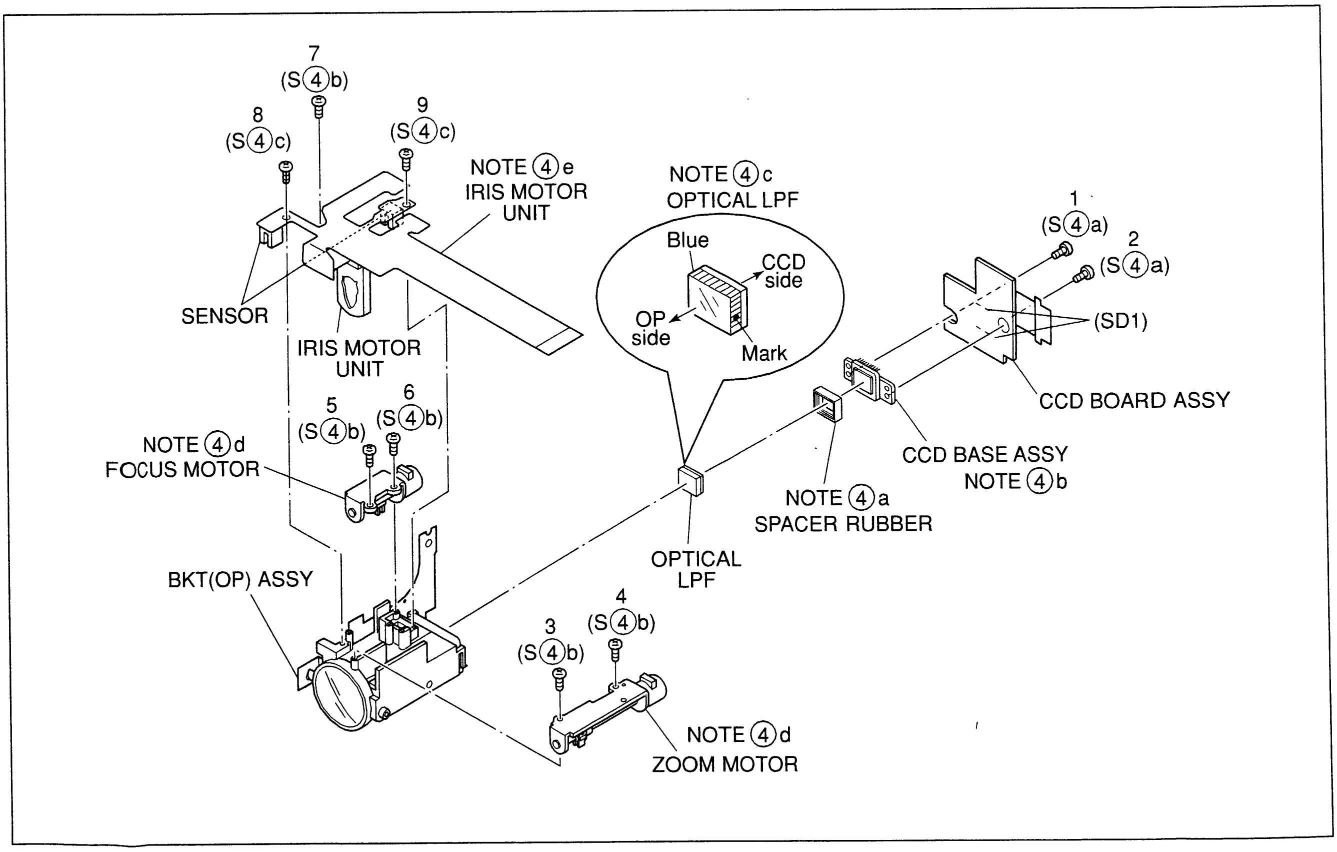


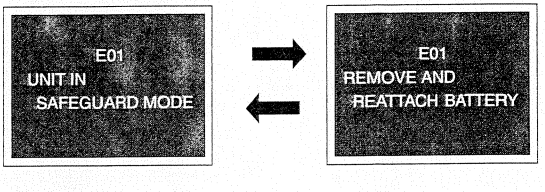
Fig. 1-6-1

1.7 EMERGENCY DISPLAY

Whenever some abnormal signal is input to the syscon CPU, an error number (E01, as an example) is displayed on the LCD monitor or (in the electronic view finder).
In every error status, such the message as shown below alternately appear over and over.

¥ In an emergency mode, all operations except turning on/off the POWER switch are ineffectual.

Example(in case of the error number E01):



E01
UNIT IN
SAFEGUARD MODE

E01
REMOVE AND
REATTACH BATTERY

LCD display	Emergency mode	Details	Possible cause
E01	LOADING	In the case the encoder position is not shifted to the next point though the loading motor has rotated in the loading direction for 4 seconds or more. This error is defined as [E01].	1. The mechanism is locked during mode shift. 2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift. 3. No power is supplied to the loading MDA.
E02	UNLOADING	In the case the encoder position is not shifted to the next point though the loading motor has rotated in the unloading direction for 4 seconds or more. This error is defined as [E02].	1. The mechanism is locked during mode shift. 2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift.
E03	TU & SUP REEL FG	In the case no REEL FG is produced for 4 seconds or more in the capstan rotation mode after loading was complete, the mechanism mode is shifted to STOP with the pinch roller set off. This error is defined as [E03]. However, no REEL EMG is detected in the SLOW/STILL mode.	1. The idler gear does not engage with the reel disk well. 2. Though the idler gear and reel disk are engaged with each other, the tape is not wound because of overload to the mechanism. 3. No FG pulse is output from the reel sensor. 4. No power is supplied to the reel sensor. 5. Tape transport operation takes place with a cassette having no tape inside. 6. The tape slackens and no pulse is produced until the slack is taken up and the tape comes into the normal status.
E04	DRUM FG	In the case there is no DRUM FG input in the drum rotation mode for 4 seconds or more. This error is defined as [E04], and the mechanism mode is shifted to STOP with the pinch roller set off.	1. The drum cannot be started or drum rotation is stopped because tape transport load is too high. 1) Tape tension is extremely high. 2) The tape is damaged or soiled with grease, etc. 2. The DRUM FG signal is not received by the syscon CPU. 1) Disconnection in the middle of the signal line. 2) Failure of the DRUM FG pulse generator (hall element). 3. No drum control voltage is supplied to the MDA. 4. No power is supplied to the DRUM MDA.
E05	—	—	—
E06	CAPSTAN FG	In the case no CAPSTAN FG is produced in the capstan rotation mode for 2 seconds or more. This error is defined as [E06], and the mechanism mode is shifted to STOP with the pinch roller set off. However, no CAPSTAN EMG is detected in the STILL/FF/REW mode.	1. The CAPSTAN FG signal is not received by the syscon CPU. 1) Disconnection in the middle of the signal line. 2) Failure of the CAPSTAN FG pulse generator (MR element). 2. No capstan control voltage is supplied to the MDA. 3. No power is supplied to the CAPSTAN MDA. 4. The capstan cannot be started or capstan rotation is stopped because tape transport load is too high. 1) Tape tension is extremely high. (Mechanical locking) 2) The tape is damaged or soiled with grease, etc. (Tape tangling occurs, etc.)

Table 1-7-1

1.8 SERVICE NOTE

Symbol No. →	①		②(⑪/⑫/⑬/⑭)										③			④		⑤			
Removing order of screw →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Place to stick screw →					*																
Reference drawing →	Fig. 1-3-1		Fig. 1-3-2										Fig. 1-3-3			Fig. 1-3-4		Fig. 1-3-5			
Screw tightening torque →	I																				

Symbol No. →	⑥					⑦	⑧		⑨/⑩			⑪		⑫	⑬				⑭		
Removing order of screw →	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Place to stick screw →		*	*	*	*									*			*	*			
Reference drawing →	Fig. 1-3-6						Fig. 1-3-7		Fig. 1-3-8			Fig. 1-3-9			Fig. 1-3-10						
Screw tightening torque →	I																II		I		

	MONITOR ASSY						
Removing order of screw →	1	2	3	4	5	6	7
Place to stick screw →							
Reference drawing →	Fig. 1-4-1, 2						
Screw tightening torque →	III		IV		III		

	VF UNIT(B/W,COLOR)					
Removing order of screw →	1	2	3	4	5	
Place to stick screw →						
Reference drawing →	Fig. 1-5-1, 2					
Screw tightening torque →	III					

	OP BLOCK ASSY								
Removing order of screw →	1	2	3	4	5	6	7	8	9
Place to stick screw →									
Reference drawing →	Fig. 1-6-1								
Screw tightening torque →	V								

< NOTE >

1) * : Dont t reuse the screw, because screw lock bond was applied to them.

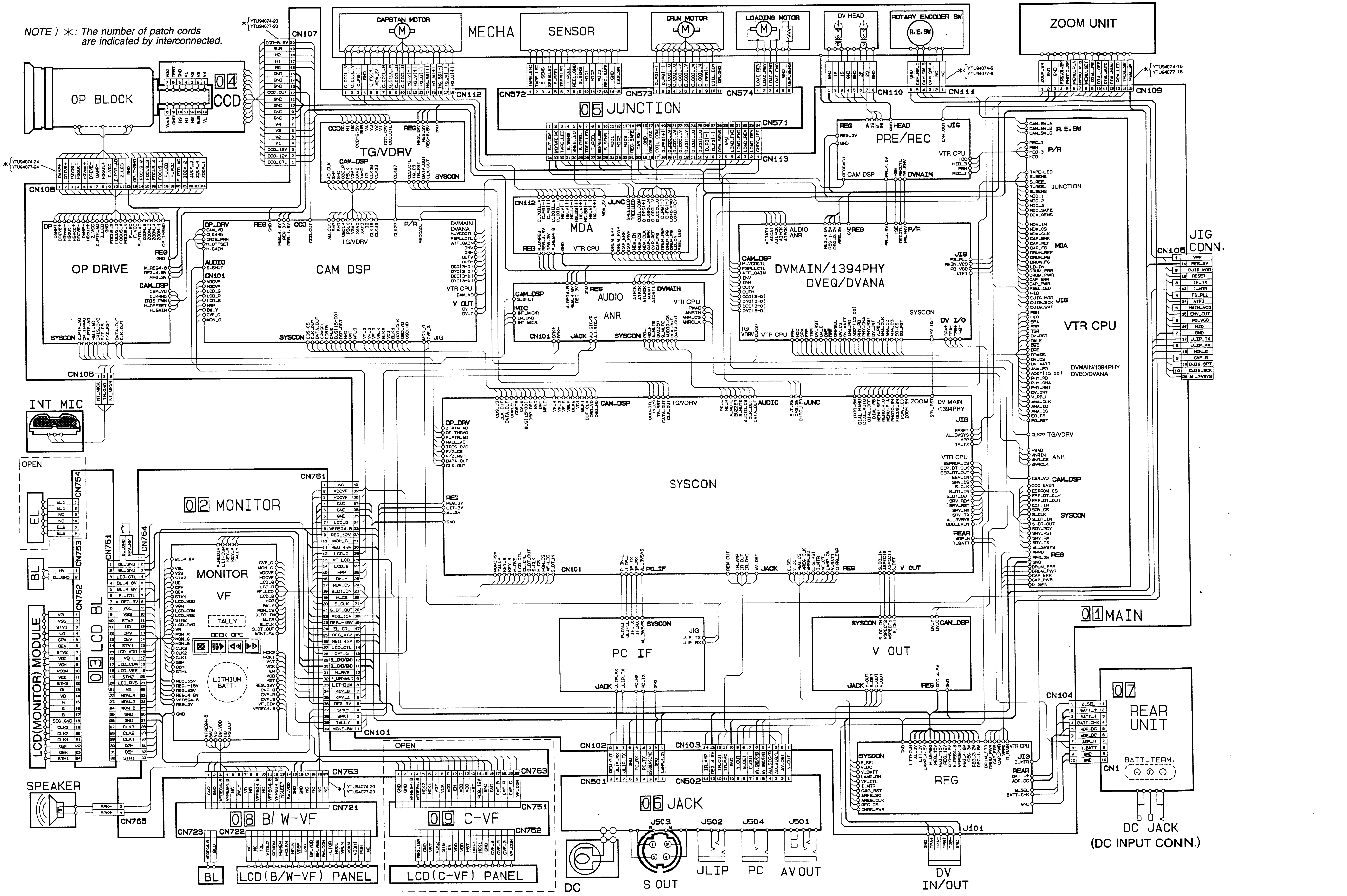
2) Pay careful attention to tightening torque for each screw.

I : 0.088N.m (0.9Kgf.cm)
II : 0.147N.m (1.5Kgf.cm)
III : 0.069N.m (0.7Kgf.cm)
IV : 0.098N.m (1.0Kgf.cm)
V : 0.118N.m (1.2Kgf.cm)

Table 1-8-1

SECTION 4
CHARTS AND DIAGRAMS

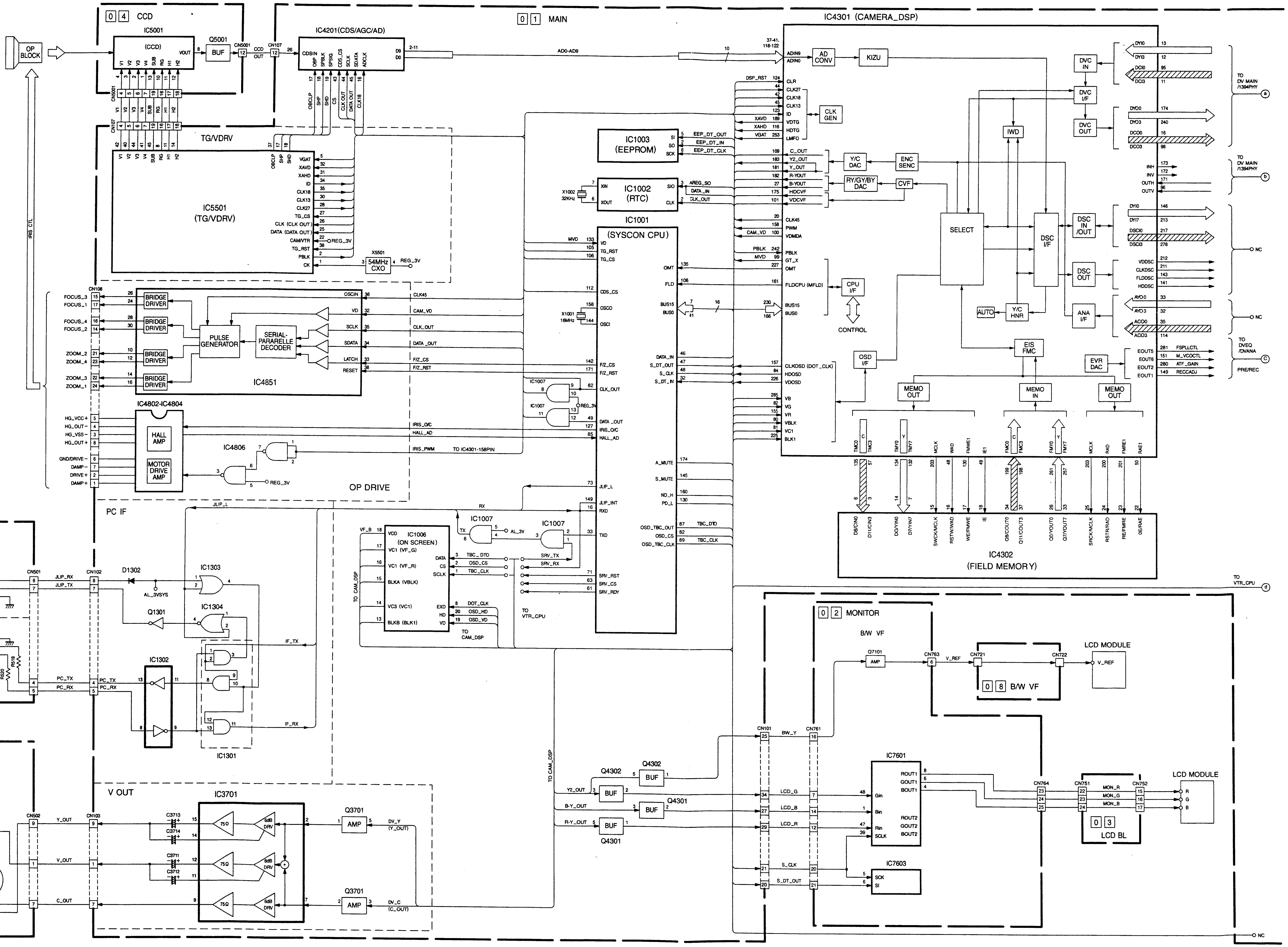
4.1 BOARD INTERCONNECTIONS



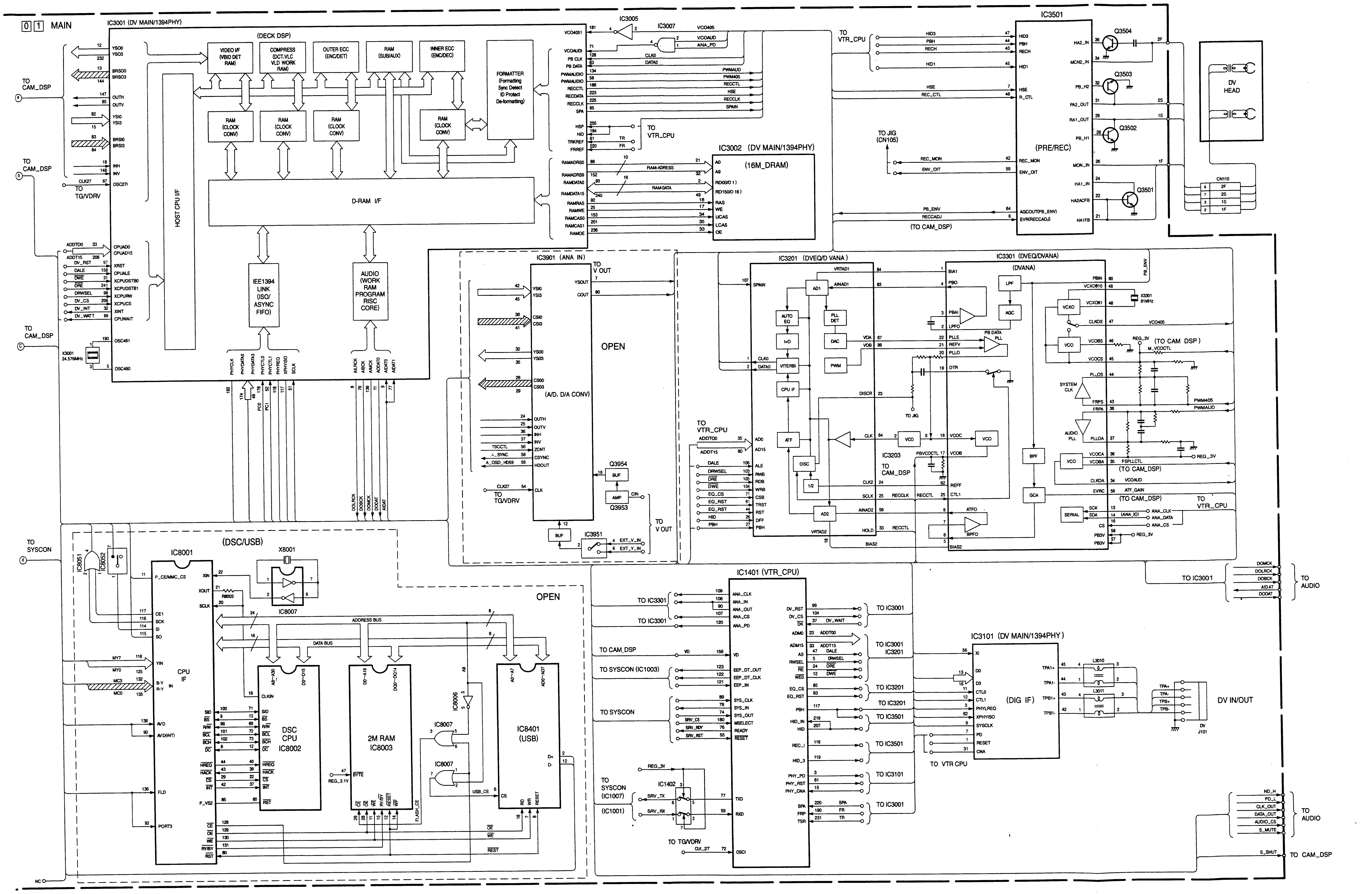
NOTE) ＊: The number of patch cords are indicated by interconnected.

MECHA
CAPSTAN MOTOR
SENSOR
DRUM MOTOR
LOADING MOTOR
DV HEAD
ROTARY ENCODER SW
ZOOM UNIT
OP BLOCK
04 CCD
CN107
CN108
CN112
CN572
CN573
CN574
CN110
CN111
CN109
05 JUNCTION
CN571
CN113
TG/VDRV
PRE/REC
OP DRIVE
CAM DSP
MDA
AUDIO ANR
DVMAIN/1394PHY DVEQ/DVANA
VTR CPU
JIG CONN.
CN105
CN106
INT MIC
OPEN
EL
BL
CN754
CN753
CN752
CN751
CN764
LCD(MONITOR) MODULE
03 LCD BL
02 MONITOR
MONITOR VF
TALLY
DECK OPE
LITHIUM BATT.
CN761
CN101
SYSCON
01 MAIN
PC IF
V OUT
07 REAR UNIT
CN104
CN1
BATT_TERM.
DC JACK (DC INPUT CONN.)
REG
CN102
CN103
CN501
CN502
06 JACK
J503
J502
J504
J501
J101
DC
S OUT
JLIP
PC
AV OUT
DV IN/OUT
SPEAKER
CN765
CN763
CN721
CN751
CN752
CN723
CN722
08 B/W-VF
09 C-VF
BL
LCD(B/W-VF) PANEL
LCD(C-VF) PANEL
YTU94074-20
YTU94077-20
YTU94074-24
YTU94077-24
YTU94074-6
YTU94077-6
YTU94074-15
YTU94077-15

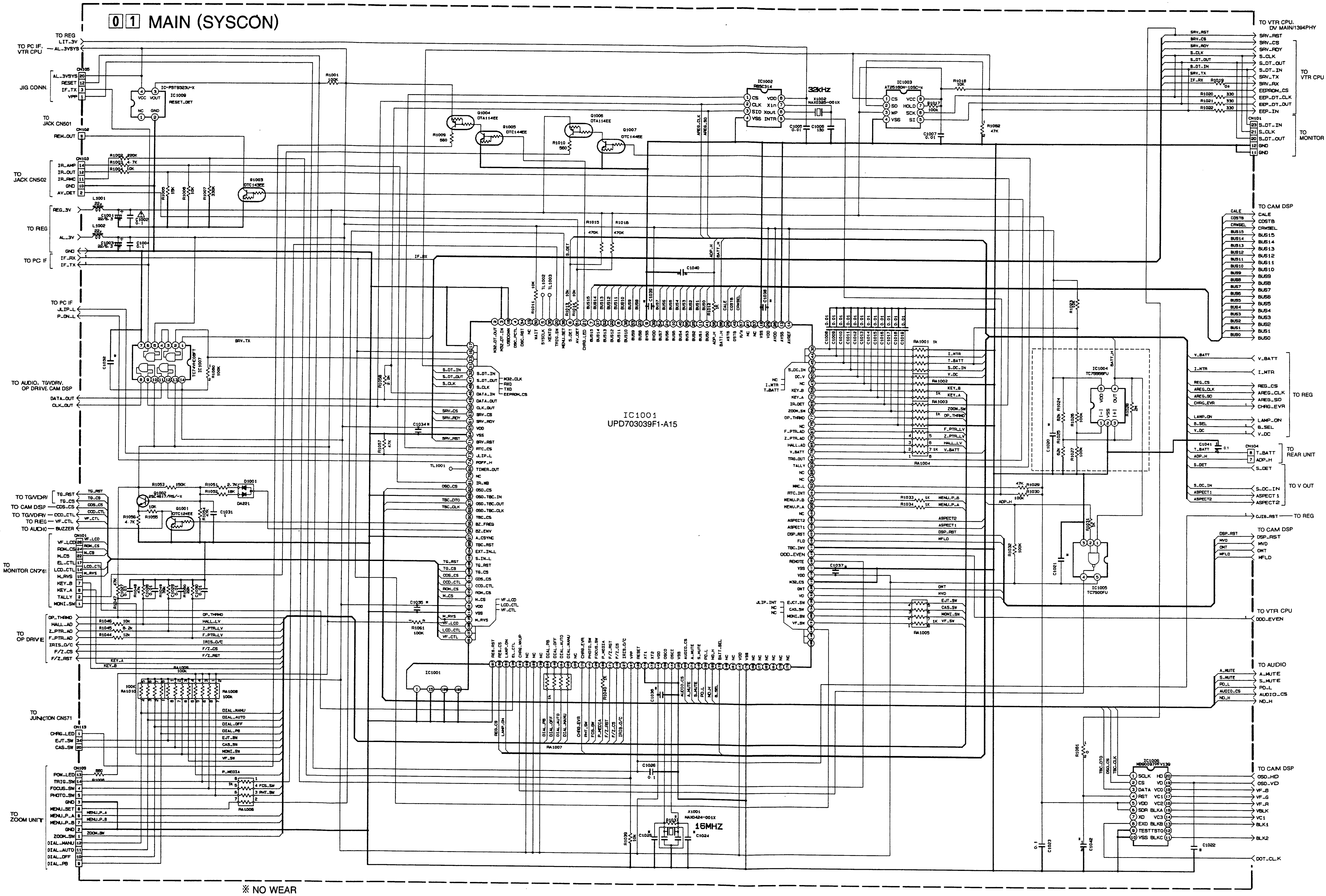
4.2 VIDEO SYSTEM BLOCK DIAGRAM



OP BLOCK
04 CCD
IC5001 (CCD)
Q5001 BUF
01 MAIN
IC4201(CDS/AGC/AD)
IC4301 (CAMERA_DSP)
AD CONV
KIZU
CLK GEN
Y/C DAC
ENC SENC
RY/GY/BY DAC
CVF
SELECT
DSC I/F
DSC IN /OUT
DSC OUT
ANA I/F
AUTO
Y/C HNR
EIS FMC
EVR DAC
OSD I/F
CPU I/F
CONTROL
DVC IN
DVC I/F
DVC OUT
IWD
MEMO OUT
MEMO IN
TO DV MAIN /1394PHY
TO DVEQ /DVANA
PRE/REC
NC
IC4302 (FIELD MEMORY)
TO VTR_CPU
IC1003 (EEPROM)
IC1002 (RTC)
IC1001 (SYSCON CPU)
X1002 32KHz
X1001 16MHz
TG/VDRV
IC5501 (TG/VDRV)
X5501 54MHz CXO
REG_3V
IRIS CTL
BRIDGE DRIVER
PULSE GENERATOR
SERIAL-PARARELLE DECODER
IC4851
IC4802-IC4804
HALL AMP
MOTOR DRIVE AMP
IC4806
OP DRIVE
PC IF
IC1007
IC1006 (ON SCREEN)
TO CAM_DSP
06 JACK
JLIP J502
PC J504
D1302
IC1303
Q1301
IC1304
IC1302
IC1301
AV JACK J501
AV OUT
S OUT J503
V OUT
IC3701
Q3701 AMP
Q4302 BUF
Q4301 BUF
02 MONITOR
B/W VF
Q7101 AMP
08 B/W VF
LCD MODULE
IC7601
IC7603
03 LCD BL


0 1 MAIN
IC3001 (DV MAIN/1394PHY)
(DECK DSP)
VIDEO I/F (VBID DET RAM)
COMPRESS (DCT,VLC VLD WORK RAM)
OUTER ECC (ENC/DET)
RAM (SUB/AUX)
INNER ECC (ENC/DEC)
FORMATTER (Formatting Sync Detect ID Protect De-formatting)
RAM (CLOCK CONV)
HOST CPU I/F
D-RAM I/F
IEE1394 LINK (ISO/ ASYNC FIFO)
AUDIO (WORK RAM PROGRAM RISC CORE)
TO CAM_DSP
TO TG/VDRV
IC3005
IC3007
TO VTR_CPU
IC3002 (DV MAIN/1394PHY)
(16M_DRAM)
IC3501
(PRE/REC)
Q3504
Q3503
Q3502
Q3501
DV HEAD
CN110
TO JIG (CN105)
(TO CAM_DSP)
IC3901 (ANA IN)
TO V OUT
OPEN
(A/D, D/A CONV)
Q3954
Q3953
IC3951
BUF
AMP
IC3201 (DVEQ/D VANA)
IC3301 (DVEQ/DVANA)
(DVANA)
IC3203
TO CAM_DSP
TO VTR_CPU
(TO CAM DSP)
X3301 81MHz
TO SYSCON
(DSC/USB)
IC8001
IC8051
IC8052
X8001
IC8007
IC8006
CPU I/F
DSC CPU IC8002
2M RAM IC8003
IC8401 (USB)
ADDRESS BUS
DATA BUS
IC1401 (VTR_CPU)
TO IC3301
TO CAM_DSP
TO SYSCON (IC1003)
TO SYSCON
TO SYSCON (IC1007)
(IC1001)
IC1402
TO TG/VDRV
TO IC3001
TO IC3201
TO IC3501
TO IC3101
TO IC3001 IC3201
TO IC3001
TO AUDIO
IC3101 (DV MAIN/1394PHY)
(DIG IF)
L3010
L3011
DV IN/OUT
DV J101
TO VTR CPU
TO AUDIO
TO CAM_DSP
NC

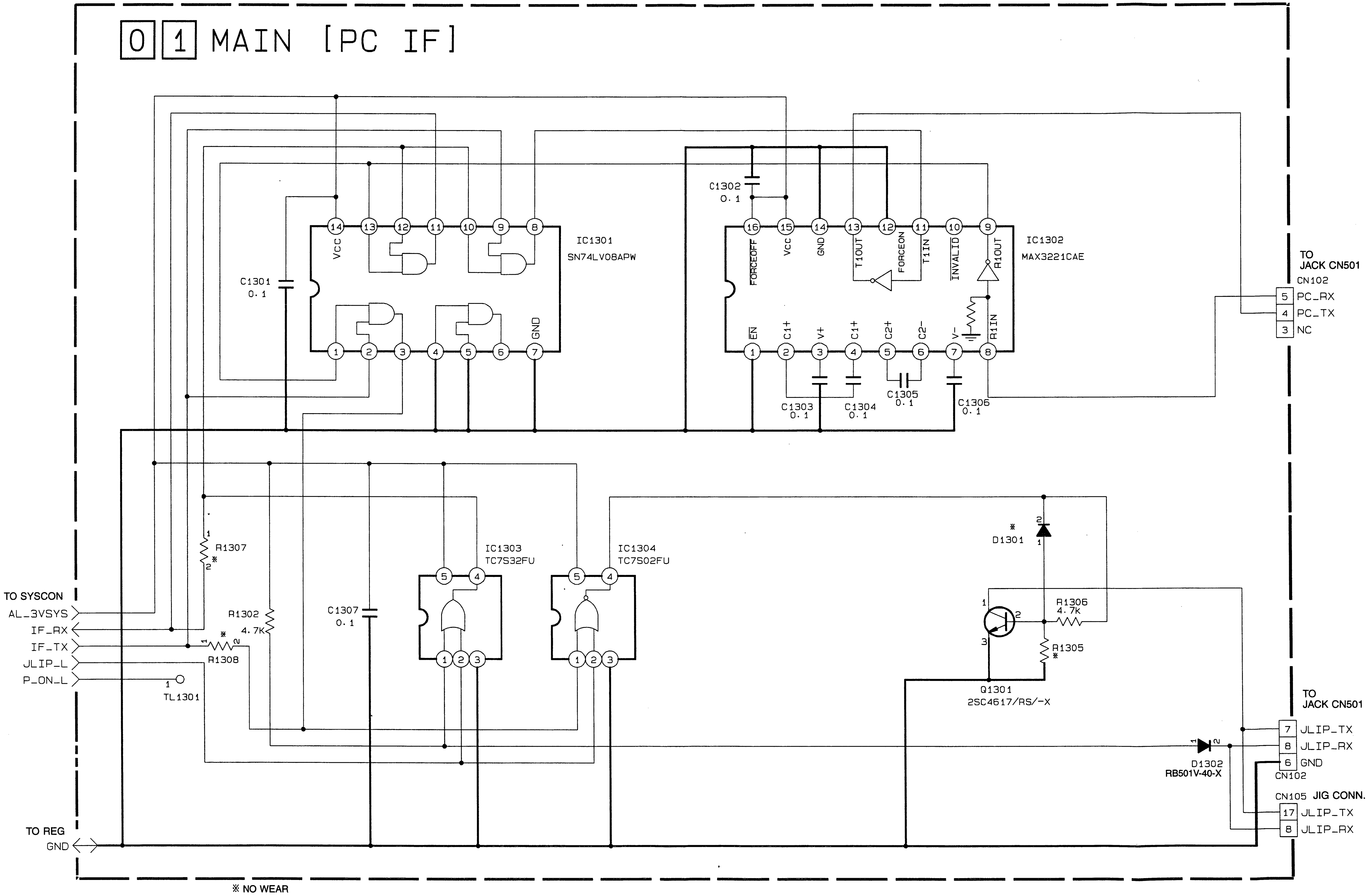
4.3 SYSCON SCHEMATIC DIAGRAM



01 MAIN (SYSCON)
TO REG
TO PC IF, VTR CPU
JIG CONN.
TO JACK CN501
TO JACK CN502
TO REG
TO PC IF
TO AUDIO, TG/VDRV, OP DRIVE CAM DSP
TO TG/VDRV
TO CAM DSP
TO TG/VDRV
TO REG
TO AUDIO
TO MONITOR CN761
TO OP DRIVE
TO JUNCTION CN571
TO ZOOM UNIT
IC1001
UPD703039F1-A15
IC1002
32kHz
IC1003
AT25160N-10SC-x
IC1004
TC7S66FU
IC1005
TC7S00FU
IC1006
MB90097PF-V139
IC1007
IC1009
RESET_DET
X1001
NAX0424-001X
15MHZ
X1002
NAX0325-001X
Q1004
DTA114EE
Q1005
DTC144EE
Q1006
DTA114EE
Q1007
DTC144EE
Q1003
DTC143EE
Q1001
DTC124EE
D1001
DA221
TO VTR CPU, DV MAIN/1394PHY
TO VTR CPU
TO MONITOR CN761
TO CAM DSP
TO REG
TO REAR UNIT
TO V OUT
TO REG
TO CAM DSP
TO VTR CPU
TO AUDIO
TO CAM DSP

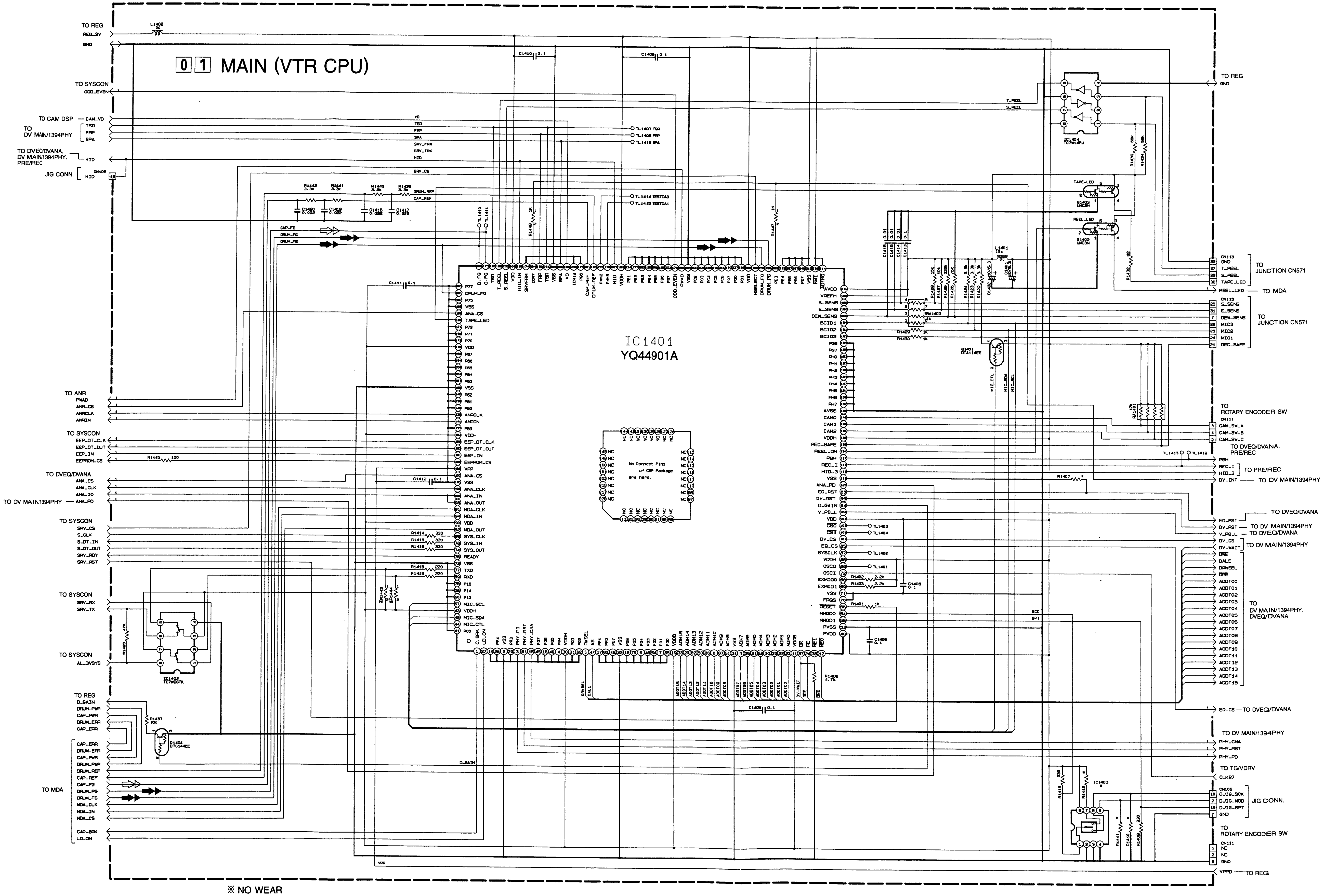
※ NO WEAR

4.4 PC IF SCHEMATIC DIAGRAM


0 1 MAIN [PC IF]
IC1301
SN74LV08APW
VCC
GND
C1301
0.1
C1302
0.1
IC1302
MAX3221CAE
FORCEOFF
VCC
GND
T1OUT
FORCEON
T1IN
INVALID
R1OUT
EN
C1+
V+
C1+
C2+
C2-
V-
R1IN
C1303
0.1
C1304
0.1
C1305
0.1
C1306
0.1
TO
JACK CN501
CN102
5 PC_RX
4 PC_TX
3 NC
TO SYSCON
AL_3VSYS
IF_RX
IF_TX
JLIP_L
P_ON_L
R1307
※
R1302
4.7K
R1308
※
TL1301
C1307
0.1
IC1303
TC7S32FU
IC1304
TC7S02FU
※
D1301
R1306
4.7K
R1305
※
Q1301
2SC4617/RS/-X
TO
JACK CN501
7 JLIP_TX
8 JLIP_RX
6 GND
CN102
D1302
RB501V-40-X
CN105 JIG CONN.
17 JLIP_TX
8 JLIP_RX
TO REG
GND

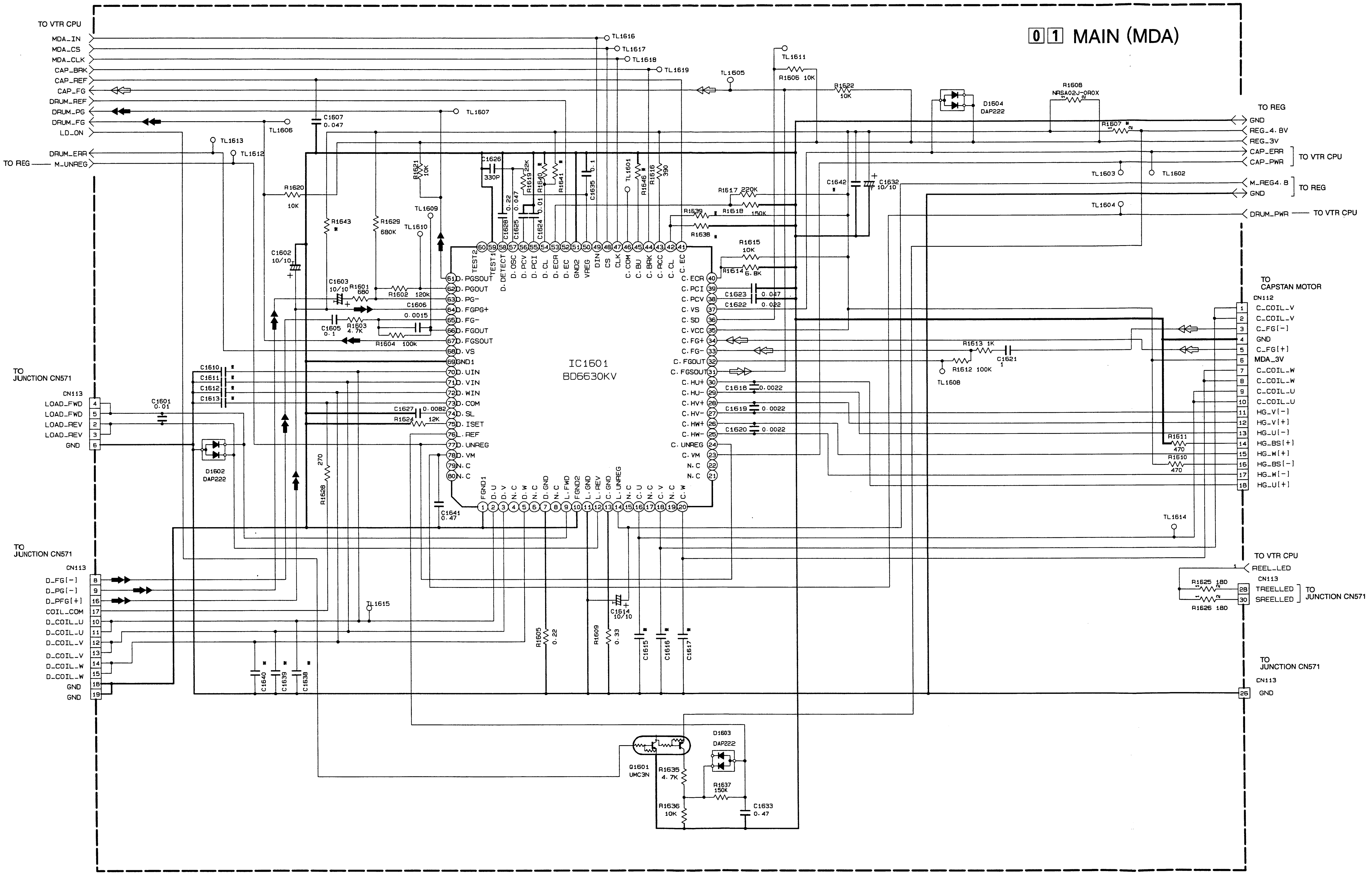
※ NO WEAR

4.5 VTR CPU SCHEMATIC DIAGRAM


01 MAIN (VTR CPU)
IC1401
YQ44901A
TO REG
TO SYSCON
TO CAM DSP
TO DV MAIN/1394PHY
TO DVEQ/DVANA. DV MAIN/1394PHY. PRE/REC
JIG CONN.
TO ANR
TO SYSCON
TO DVEQ/DVANA
TO DV MAIN/1394PHY
TO SYSCON
TO SYSCON
TO SYSCON
TO REG
TO MDA
TO REG
TO JUNCTION CN571
TO MDA
TO JUNCTION CN571
TO ROTARY ENCODER SW
TO DVEQ/DVANA. PRE/REC
TO PRE/REC
TO DV MAIN/1394PHY
TO DVEQ/DVANA
TO DV MAIN/1394PHY
TO DVEQ/DVANA
TO DV MAIN/1394PHY
TO DV MAIN/1394PHY. DVEQ/DVANA
TO DVEQ/DVANA
TO DV MAIN/1394PHY
TO TG/VDRV
JIG CONN.
TO ROTARY ENCODER SW
TO REG
IC1402 TC7W66FK
IC1404 TC7W14FU
IC1403
Q1401 DTA114EE
Q1402 UN5C5N
Q1403 UN5C5N
Q1404 DTC144EE
No Connect Pins of CSP Package are here.

※ NO WEAR

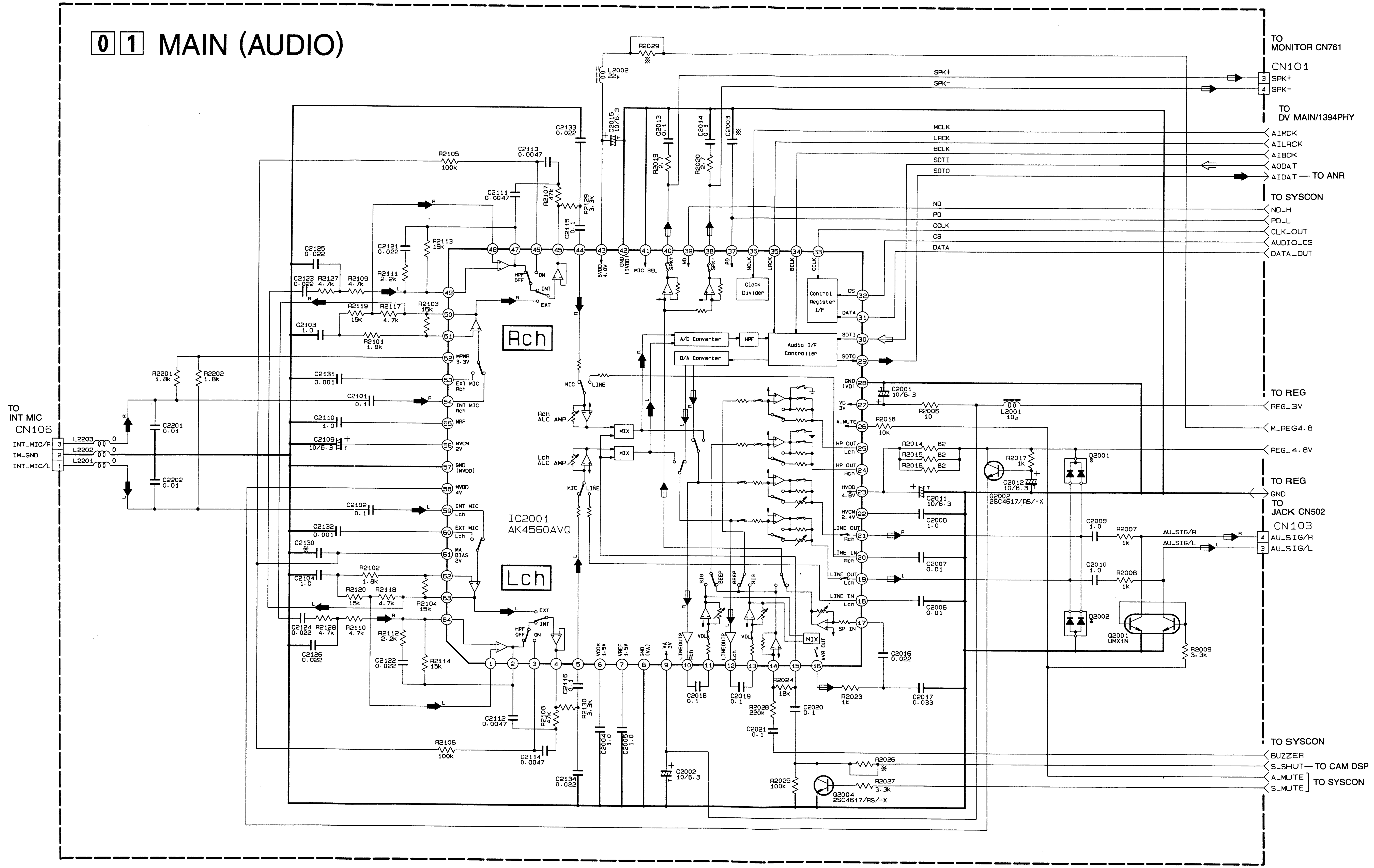
4.6 MDA SCHEMATIC DIAGRAM



01 MAIN (MDA)
TO VTR CPU
MDA_IN
MDA_CS
MDA_CLK
CAP_BRK
CAP_REF
CAP_FG
DRUM_REF
DRUM_PG
DRUM_FG
LD_ON
DRUM_ERR
TO REG
M_UNREG
TO JUNCTION CN571
CN113
LOAD_FWD
LOAD_FWD
LOAD_REV
LOAD_REV
GND
D_FG(-)
D_PG(-)
D_PFG(+)
COIL_COM
D_COIL_U
D_COIL_U
D_COIL_V
D_COIL_V
D_COIL_W
D_COIL_W
GND
GND
IC1601
BD6630KV
D1602
DAP222
D1603
DAP222
D1604
DAP222
Q1601
UMC3N
TO REG
GND
REG_4.8V
REG_3V
CAP_ERR
CAP_PWR
TO VTR CPU
M_REG4.8
GND
TO REG
DRUM_PWR
TO VTR CPU
TO CAPSTAN MOTOR
CN112
C_COIL_V
C_COIL_V
C_FG(-)
GND
C_FG(+)
MDA_3V
C_COIL_W
C_COIL_W
C_COIL_U
C_COIL_U
HG_V(-)
HG_V(+)
HG_U(-)
HG_BS(+)
HG_W(+)
HG_BS(-)
HG_W(-)
HG_U(+)
TO VTR CPU
REEL_LED
CN113
TREELLED
SREELLED
TO JUNCTION CN571
TO JUNCTION CN571
CN113
GND
R1608 NRSA02J-0R0X
R1607
R1606 10K
R1622 10K
R1617 220K
R1618 150K
R1639
R1638
R1615 10K
R1614 6.8K
R1613 1K
R1612 100K
C1621 1
R1611 470
R1610 470
R1625 180
R1626 180
R1620 10K
R1621 10K
R1643
R1629 680K
R1601 680
R1602 120K
R1603 4.7K
R1604 100K
R1624 12K
R1628 270
R1605 0.22
R1609 0.33
R1619 22K
R1640
R1641
R1646
R1616 390
R1635 4.7K
R1636 10K
R1637 150K
C1607 0.047
C1626 330P
C1628 0.22
C1625 0.047
C1624 0.01
C1635 0.1
C1642
C1632 10/10
C1623 0.047
C1622 0.022
C1618 0.0022
C1619 0.0022
C1620 0.0022
C1602 10/10
C1603 10/10
C1605 0.1
C1606 0.0015
C1627 0.0082
C1641 0.47
C1601 0.01
C1610
C1611
C1612
C1613
C1614 10/10
C1615
C1616
C1617
C1640
C1639
C1638
C1633 0.47
TL1601
TL1602
TL1603
TL1604
TL1605
TL1606
TL1607
TL1608
TL1609
TL1610
TL1611
TL1612
TL1613
TL1614
TL1615
TL1616
TL1617
TL1618
TL1619
D.PGSOUT
D.PGOUT
D.PG-
D.FGPG+
D.FG-
D.FGOUT
D.FGSOUT
D.VS
GND1
D.UIN
D.VIN
D.WIN
D.COM
D.SL
D.ISET
L.REF
D.UNREG
D.VM
N.C
N.C
TEST2
TEST1
D.DETECT
D.OSC
D.PCV
D.PCI
D.CL
D.ECR
D.EC
GND2
VREG
DIN
CS
CLK
C.COM
C.BU
C.BRK
C.RCC
C.CL
C.EC
C.ECR
C.PCI
C.PCV
C.VS
C.SD
C.VCC
C.FG+
C.FG-
C.FGOUT
C.FGSOUT
C.HU+
C.HU-
C.HV+
C.HV-
C.HW+
C.HW-
C.UNREG
C.VM
N.C
N.C
FGND1
D.U
D.V
N.C
D.W
N.C
D.GND
N.C
L.FWD
FGND2
L.GND
L.REV
C.GND
L.UNREG
N.C
C.U
N.C
C.V
N.C
C.W

※ NO WEAR

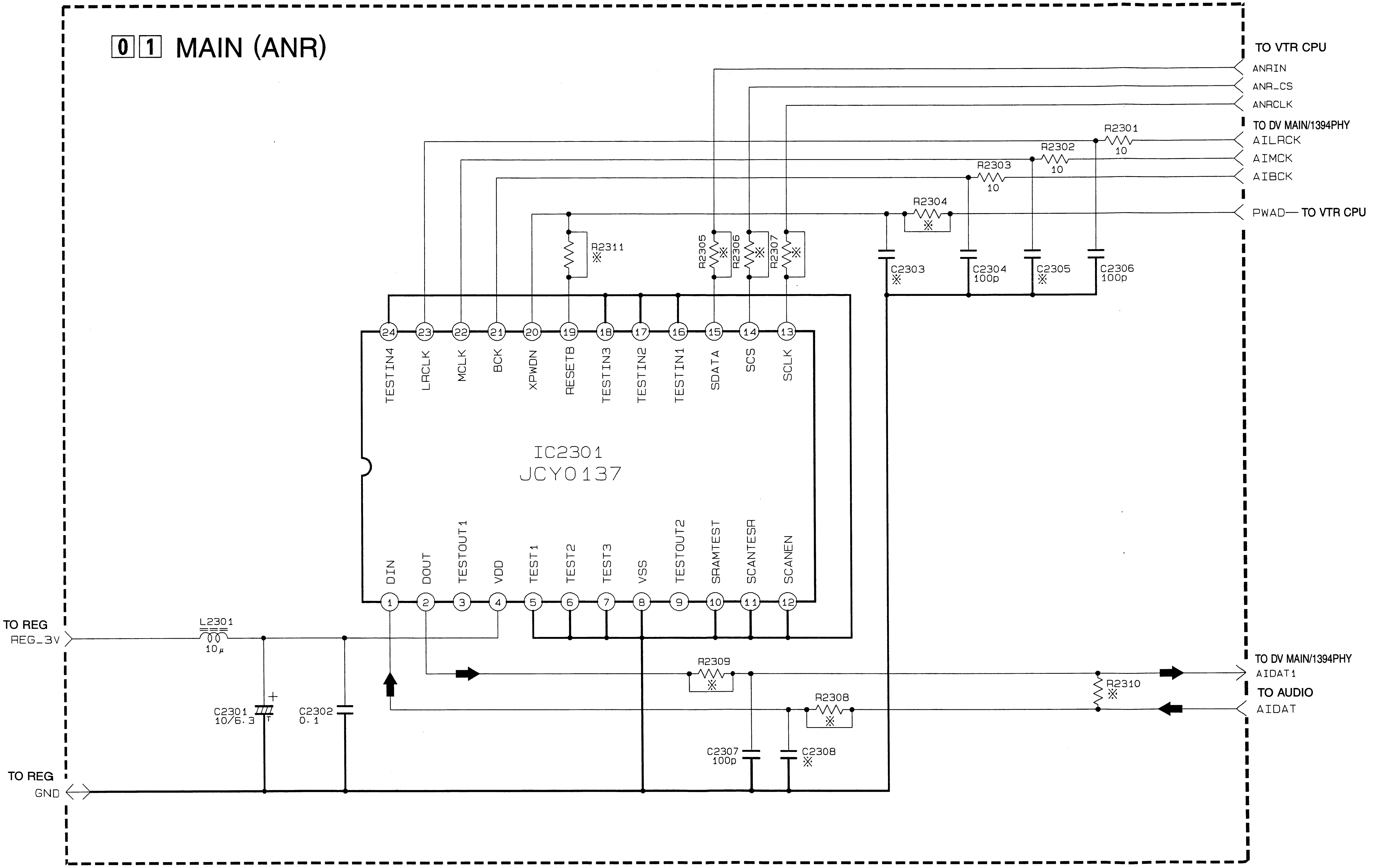
4.7 AUDIO SCHEMATIC DIAGRAM



01 MAIN (AUDIO)
TO MONITOR CN761
CN101
3 SPK+
4 SPK-
TO DV MAIN/1394PHY
AIMCK
AILRCK
AIBCK
AODAT
AIDAT — TO ANR
TO SYSCON
ND_H
PD_L
CLK_OUT
AUDIO_CS
DATA_OUT
TO REG
REG_3V
M_REG4.8
REG_4.8V
TO REG
GND
TO JACK CN502
CN103
4 AU_SIG/R
3 AU_SIG/L
TO SYSCON
BUZZER
S_SHUT — TO CAM DSP
A_MUTE
S_MUTE
TO SYSCON
TO INT MIC
CN106
INT_MIC/R 3
IM_GND 2
INT_MIC/L 1
L2203
L2202
L2201
C2201 0.01
C2202 0.01
R2201 1.8K
R2202 1.8K
IC2001
AK4560AVQ
Rch
Lch
R2029 ※
L2002 22µ
C2015 10/6.3
C2013 0.1
C2014 0.1
C2003 ※
R2019 2.7
R2020 2.7
C2133 0.022
C2113 0.0047
R2105 100K
C2111 0.0047
R2107 47K
R2129 3.3K
C2115 0.1
C2125 0.022
C2121 0.022
R2113 15K
C2123 0.022
R2127 4.7K
R2109 4.7K
R2111 2.2K
R2119 15K
R2117 4.7K
R2103 15K
C2103 1.0
R2101 1.8K
C2131 0.001
C2101 0.1
C2110 1.0
C2109 10/6.3
C2102 0.1
C2132 0.001
C2130 ※
C2104 1.0
R2102 1.8K
R2120 15K
R2118 4.7K
R2104 15K
C2124 0.022
R2128 4.7K
R2110 4.7K
R2112 2.2K
C2126 0.022
C2122 0.022
R2114 15K
C2112 0.0047
R2108 47K
C2116 0.1
R2130 3.3K
R2106 100K
C2114 0.0047
C2134 0.022
C2004 1.0
C2005 1.0
C2002 10/6.3
SPK+
SPK-
MCLK
LRCK
BCLK
SDTI
SDTO
ND
PD
CCLK
CS
DATA
SVDD 4.0V
GND (SVDD)
MIC SEL
Clock Divider
Control Register I/F
A/D Converter
HPF
D/A Converter
Audio I/F Controller
MIX
Rch ALC AMP
Lch ALC AMP
MIC
LINE
HPF OFF
ON
INT
EXT
MPWR 3.3V
EXT MIC Rch
INT MIC Rch
MRF
MVCM 2V
GND (MVDD)
MVDD 4V
INT MIC Lch
EXT MIC Lch
MA BIAS 2V
GND (VD)
VD 3V
A_MUTE
HP OUT Lch
HP OUT Rch
MVDD 4.8V
MVCM 2.4V
LINE OUT Rch
LINE IN Rch
LINE OUT Lch
LINE IN Lch
SP IN
AVR OUT
VCOM 1.5V
VREF 1.5V
GND (VA)
VA 3V
LINEOUT2 Rch
LINEOUT2 Lch
VOL
SIG
BEEP
C2001 10/6.3
R2006 10
L2001 10µ
R2018 10K
R2014 82
R2015 82
R2016 82
R2017 1K
C2012 10/6.3
Q2002 2SC4617/RS/-X
C2011 10/6.3
C2008 1.0
C2007 0.01
C2006 0.01
C2016 0.022
C2017 0.033
R2023 1K
R2024 18K
R2028 220K
C2020 0.1
C2021 0.1
C2018 0.1
C2019 0.1
R2026 ※
R2027 3.3K
R2025 100K
Q2004 2SC4617/RS/-X
D2001 ※
D2002 ※
C2009 1.0
R2007 1K
C2010 1.0
R2008 1K
AU_SIG/R
AU_SIG/L
Q2001 UMX1N
R2009 3.3K

※ NO WEAR

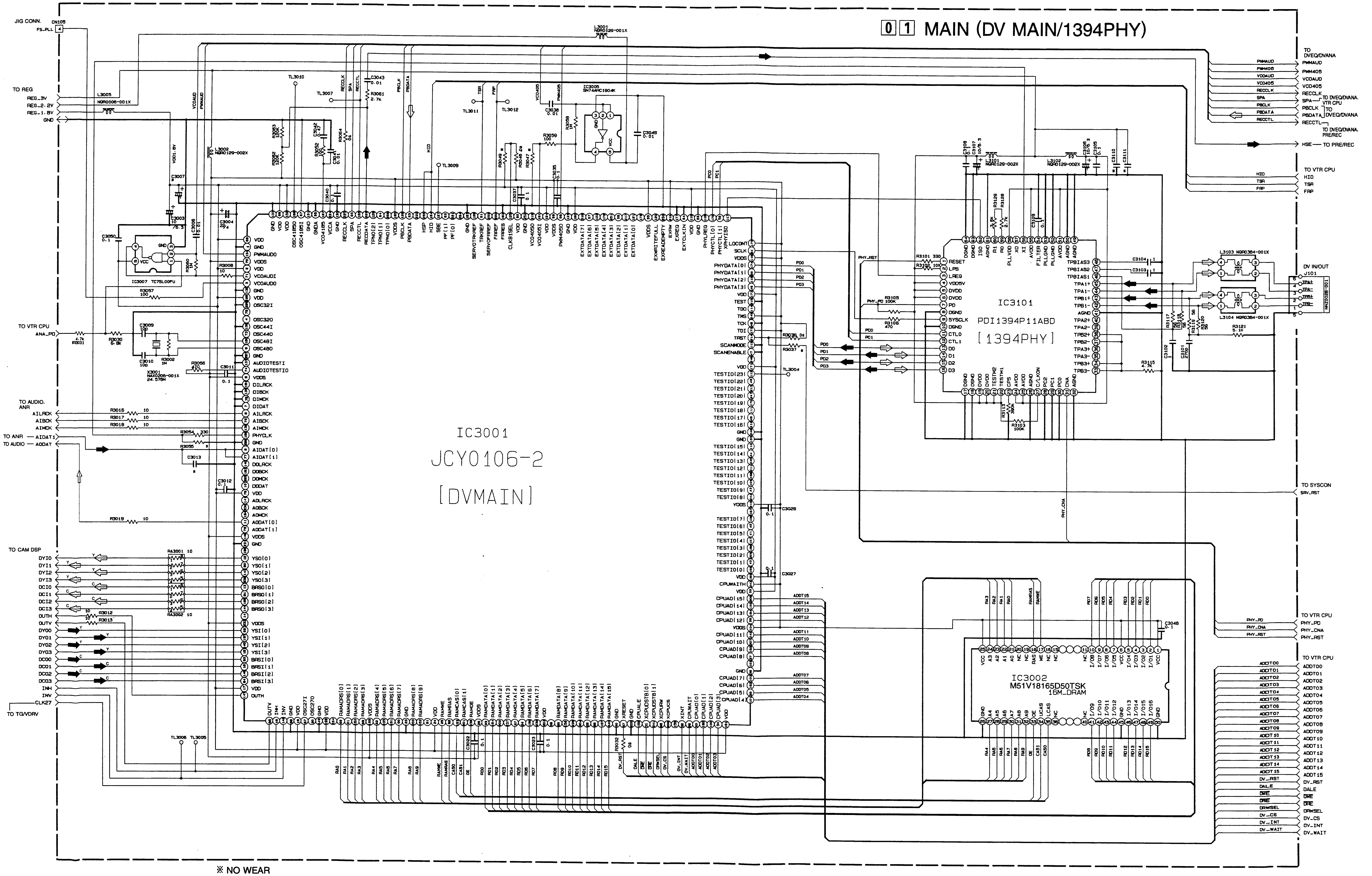
4.8 ANR SCHEMATIC DIAGRAM



0 1 MAIN (ANR)
TO VTR CPU
ANRIN
ANR_CS
ANRCLK
TO DV MAIN/1394PHY
AILRCK
AIMCK
AIBCK
PWAD— TO VTR CPU
R2301
10
R2302
10
R2303
10
R2304
※
R2311
※
R2305
※
R2306
※
R2307
※
C2303
※
C2304
100p
C2305
※
C2306
100p
IC2301
JCY0137
24 TESTIN4
23 LRCLK
22 MCLK
21 BCK
20 XPWDN
19 RESETB
18 TESTIN3
17 TESTIN2
16 TESTIN1
15 SDATA
14 SCS
13 SCLK
1 DIN
2 DOUT
3 TESTOUT1
4 VDD
5 TEST1
6 TEST2
7 TEST3
8 VSS
9 TESTOUT2
10 SRAMTEST
11 SCANTESR
12 SCANEN
TO REG
REG_3V
L2301
10µ
C2301
10/6.3
C2302
0.1
TO REG
GND
R2309
※
C2307
100p
C2308
※
R2308
※
R2310
※
TO DV MAIN/1394PHY
AIDAT1
TO AUDIO
AIDAT

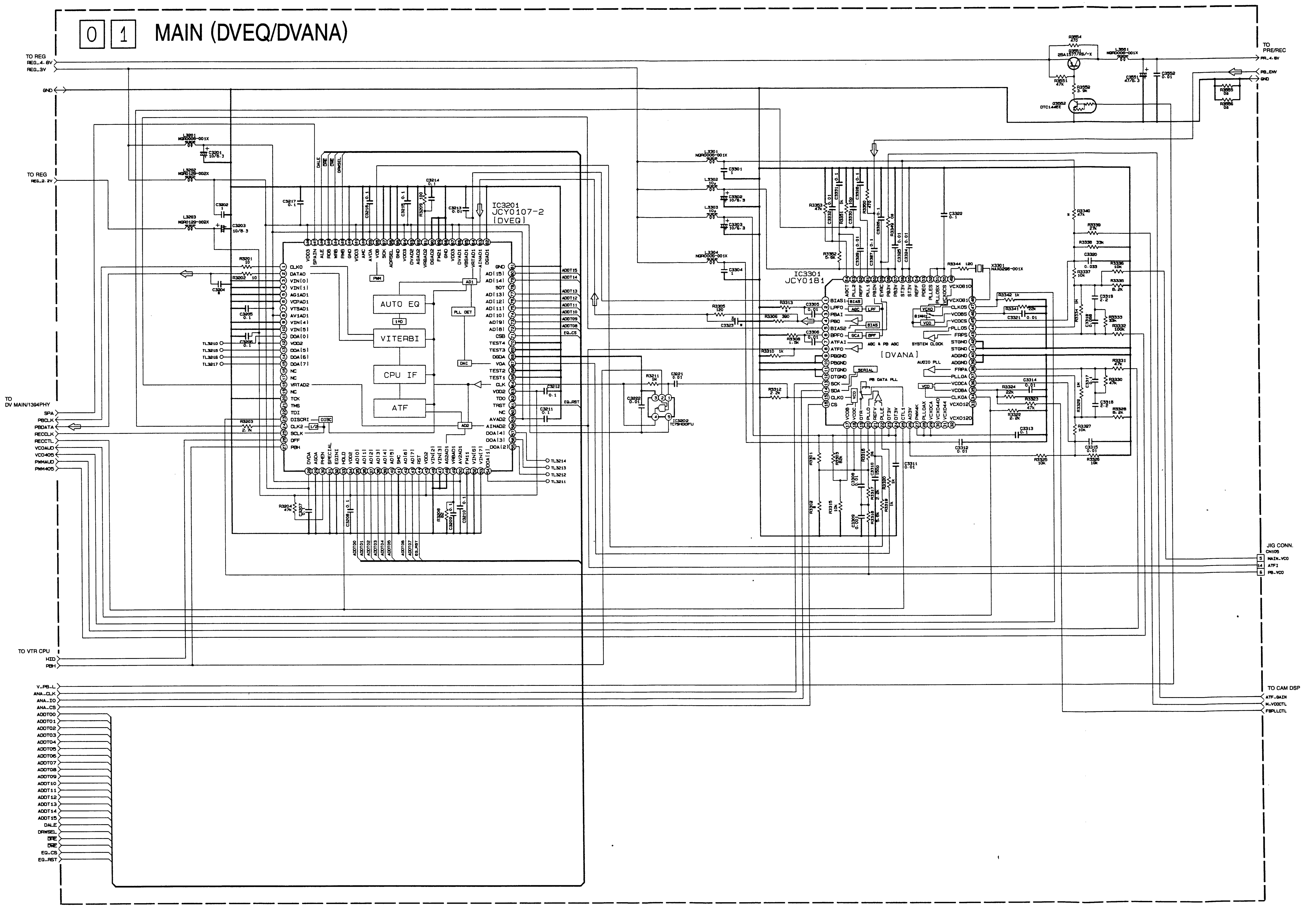
※ NO WEAR

4.9 DV MAIN/1394PHY SCHEMATIC DIAGRAM


01 MAIN (DV MAIN/1394PHY)
JIG CONN.
CN105
FS_PLL
TO REG
REG_3V
REG_2.2V
REG_1.8V
GND
TO VTR CPU
ANA_PD
TO AUDIO, ANR
AILRCK
AIBCK
AIMCK
TO ANR — AIDAT1
TO AUDIO — AODAT
TO CAM DSP
DYI0
DYI1
DYI2
DYI3
DCI0
DCI1
DCI2
DCI3
OUTH
OUTV
DYO0
DYO1
DYO2
DYO3
DCO0
DCO1
DCO2
DCO3
INH
INV
CLK27
TO TG/VDRV
IC3001
JCY0106-2
[DVMAIN]
IC3007 TC7SL00FU
IC3005 SN74AHC1G04K
X3001 NAX0205-001X 24.576M
L3005 NQR0006-001X
L3002 NQR0129-002X
L3001 NQR0129-001X
IC3101
PDI1394P11ABD
[1394PHY]
L3101 NQR0129-002X
L3102 NQR0129-002X
L3103 NQR0384-001X
L3104 NQR0384-001X
DV IN/OUT
J101
TPA+
TPA-
TPB+
TPB-
IC3002
M51V18165D50TSK
16M_DRAM
TO DVEQ/DVANA
PWMAUD
PWM405
VCOAUD
VCO405
RECCLK
SPA
PBCLK
PBDATA
RECCTL
TO DVEQ/DVANA, VTR CPU
TO DVEQ/DVANA
TO DVEQ/DVANA, PRE/REC
HSE — TO PRE/REC
TO VTR CPU
HID
TSR
FRP
TO SYSCON
SRV_RST
TO VTR CPU
PHY_PD
PHY_CNA
PHY_RST
TO VTR CPU
ADDT00
ADDT01
ADDT02
ADDT03
ADDT04
ADDT05
ADDT06
ADDT07
ADDT08
ADDT09
ADDT10
ADDT11
ADDT12
ADDT13
ADDT14
ADDT15
DV_RST
DALE
DRE
DWE
DRWSEL
DV_CS
DV_INT
DV_WAIT
TL3004
TL3005
TL3006
TL3007
TL3009
TL3010
TL3011
TL3012

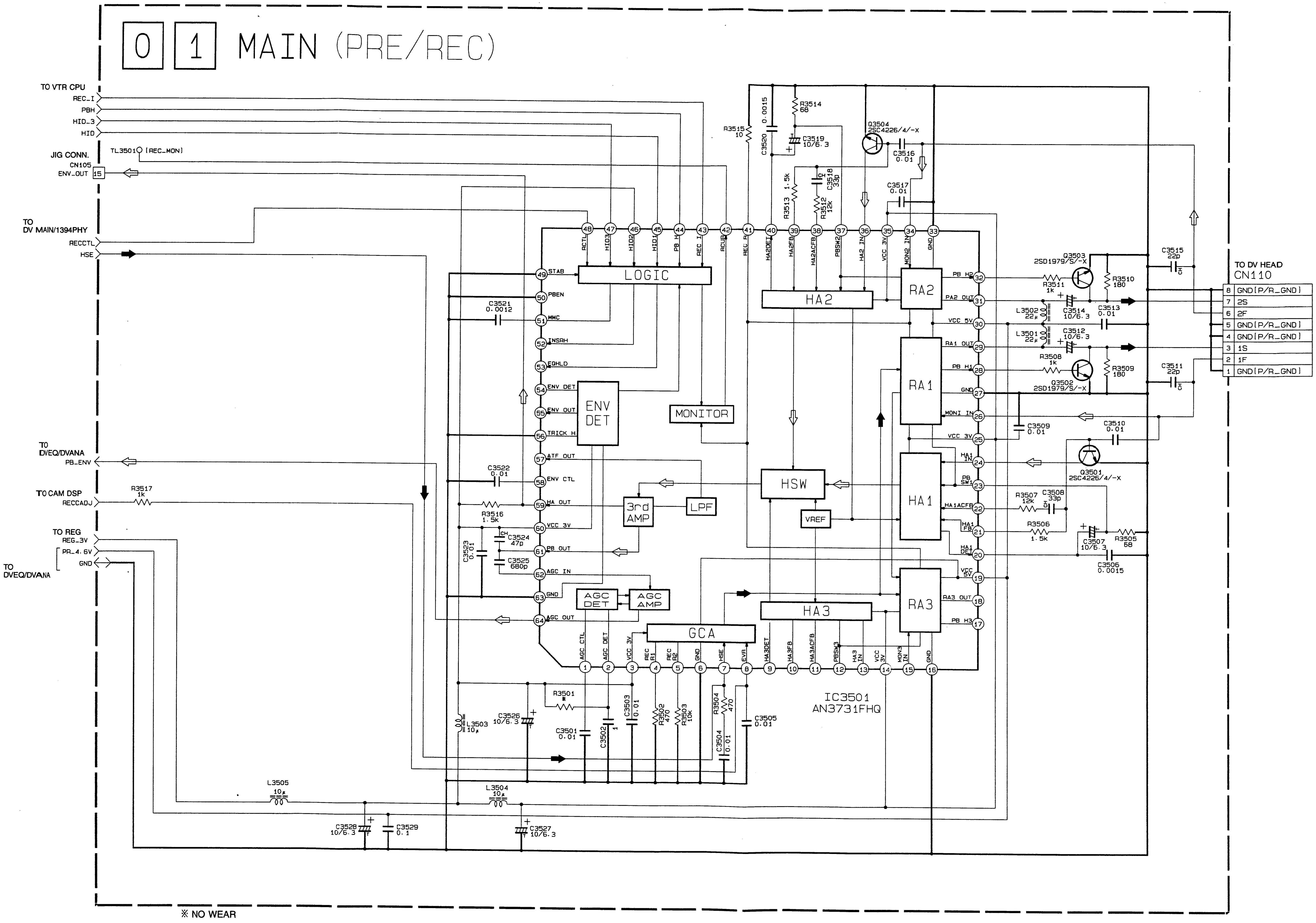
※ NO WEAR

4.10 DVEQ/DVANA SCHEMATIC DIAGRAM


0 1 MAIN (DVEQ/DVANA)
TO REG
REG_4.8V
REG_3V
GND
L3201 NQR0006-001X
C3201 10/6.3
L3202 NQR0129-002X
TO REG
REG_2.2V
C3202 1
L3203 NQR0129-002X
C3203 10/6.3
R3201 10
R3202 10
C3204
C3205 0.1
C3206 0.1
TL3210
TL3215
TL3216
TL3217
TO DV MAIN/1394PHY
SPA
PBCLK
PBDATA
RECCLK
RECCTL
VCOAUD
VCO405
PWMAUD
PWM405
R3203 2.7k
IC3201
JCY0107-2
[DVEQ]
AUTO EQ
VITERBI
CPU IF
ATF
PWM
PLL DET
DAC
TL3214
TL3213
TL3212
TL3211
R3204 47k
C3207
C3208 0.1
C3209
C3210 0.1
IC3202 TC7SH00FU
IC3301
JCY0181
[DVANA]
X3301
TO PRE/REC
PR_4.6V
PB_ENV
GND
R3555 0Ω
R3556 0Ω
JIG CONN.
CN105
5 MAIN_VCO
14 ATFI
6 PB_VCO
TO VTR CPU
HID
PBH
V_PB_L
ANA_CLK
ANA_IO
ANA_CS
ADDT00
ADDT01
ADDT02
ADDT03
ADDT04
ADDT05
ADDT06
ADDT07
ADDT08
ADDT09
ADDT10
ADDT11
ADDT12
ADDT13
ADDT14
ADDT15
DALE
DRWSEL
DRE
DWE
EQ_CS
EQ_RST
TO CAM DSP
ATF_GAIN
M_VCOCTL
FSPLLCTL

※ NO WEAR

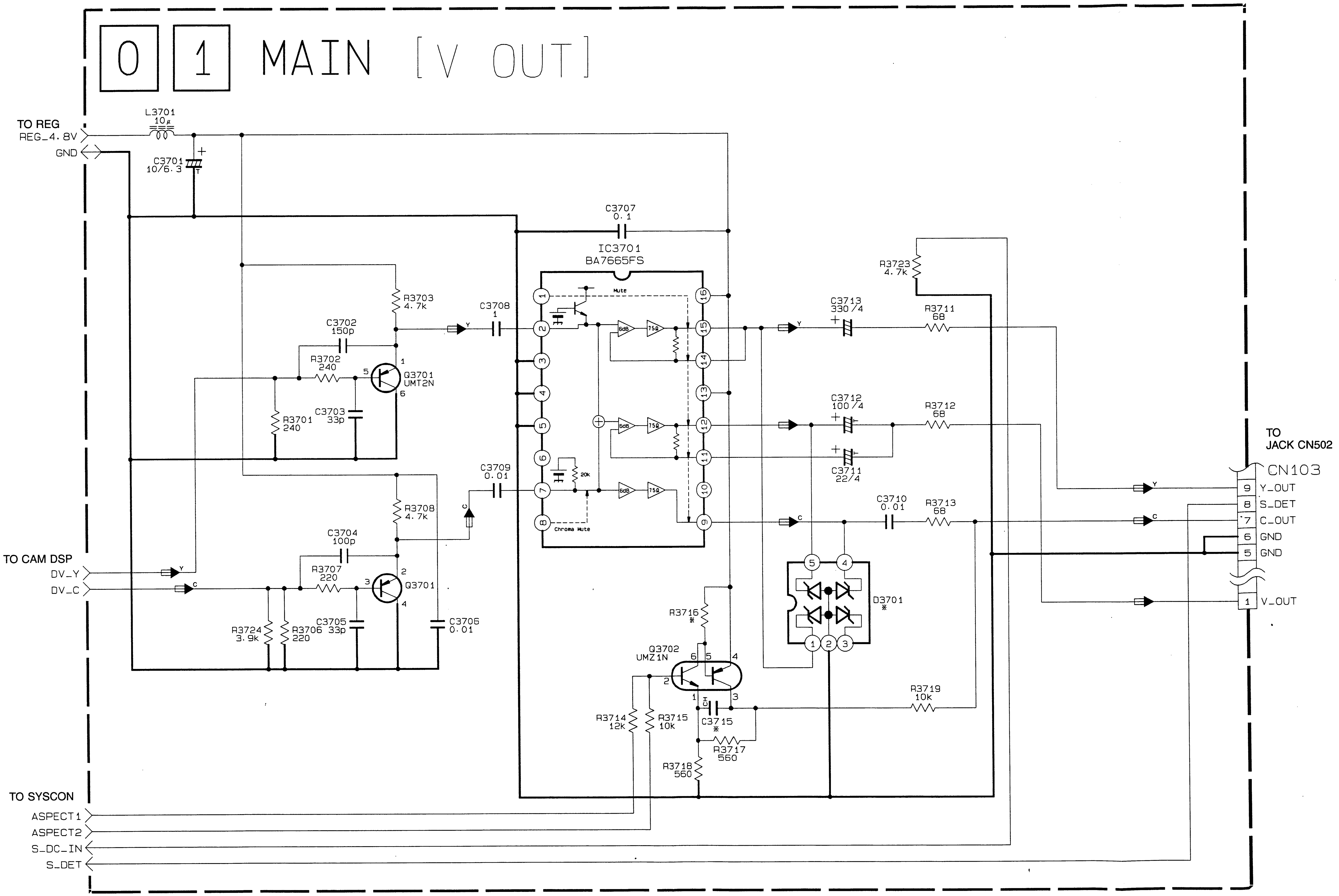
4.11 PRE/REC SCHEMATIC DIAGRAM



0 1 MAIN (PRE/REC)
TO VTR CPU
REC_I
PBH
HID_3
HID
JIG CONN.
CN105
ENV_OUT
15
TL3501 (REC_MON)
TO DV MAIN/1394PHY
RECCTL
HSE
TO DVEQ/DVANA
PB_ENV
TO CAM DSP
RECCADJ
R3517 1k
TO REG
REG_3V
PR_4.6V
GND
TO DVEQ/DVANA
LOGIC
ENV DET
MONITOR
3rd AMP
LPF
HSW
VREF
AGC DET
AGC AMP
GCA
HA2
HA1
HA3
RA2
RA1
RA3
STAB
PBEN
MMC
INSRH
EQHLD
ENV DET
ENV OUT
TRICK H
ATF OUT
ENV CTL
HA OUT
VCC 3V
PB OUT
AGC IN
GND
AGC OUT
RCTL
HID3
HID2
HID1
PB H
REC I
RCUB
REC R
HA2DET
HA2FB
HA2ACFB
PBSW2
HA2 IN
VCC 3V
MON2 IN
GND
PB H2
PA2 OUT
VCC 5V
RA1 OUT
PB H1
GND
MONI IN
VCC 3V
HA1 IN
PB SW1
HA1ACFB
HA1 FB
HA1 DET
VCC 5V
RA3 OUT
PB H3
AGC CTL
AGC DET
VCC 3V
REC R1
REC R2
GND
HSE
EVR
HA3DET
HA3FB
HA3ACFB
PBSW3
HA3 IN
VCC 3V
MON3 IN
GND
IC3501
AN3731FHQ
R3515 10
C3520 0.0015
R3514 68
C3519 10/6.3
Q3504 2SC4226/4/-X
C3516 0.01
R3513 1.5k
R3512 12k
C3518 33p
C3517 0.01
C3521 0.0012
C3522 0.01
R3516 1.5k
C3524 47p
C3525 680p
C3523 0.01
Q3503 2SD1979/S/-X
R3511 1k
R3510 180
C3514 10/6.3
C3513 0.01
L3502 22µ
L3501 22µ
C3512 10/6.3
R3508 1k
R3509 180
Q3502 2SD1979/S/-X
C3515 22p
C3511 22p
C3509 0.01
C3510 0.01
Q3501 2SC4226/4/-X
R3507 12k
C3508 33p
R3506 1.5k
C3507 10/6.3
R3505 68
C3506 0.0015
TO DV HEAD
CN110
8 GND(P/R_GND)
7 2S
6 2F
5 GND(P/R_GND)
4 GND(P/R_GND)
3 1S
2 1F
1 GND(P/R_GND)
R3501 ※
C3501 0.01
C3502 1
C3503 0.01
R3502 470
R3503 10k
R3504 470
C3504 0.01
C3505 0.01
L3503 10µ
C3526 10/6.3
L3505 10µ
L3504 10µ
C3528 10/6.3
C3529 0.1
C3527 10/6.3

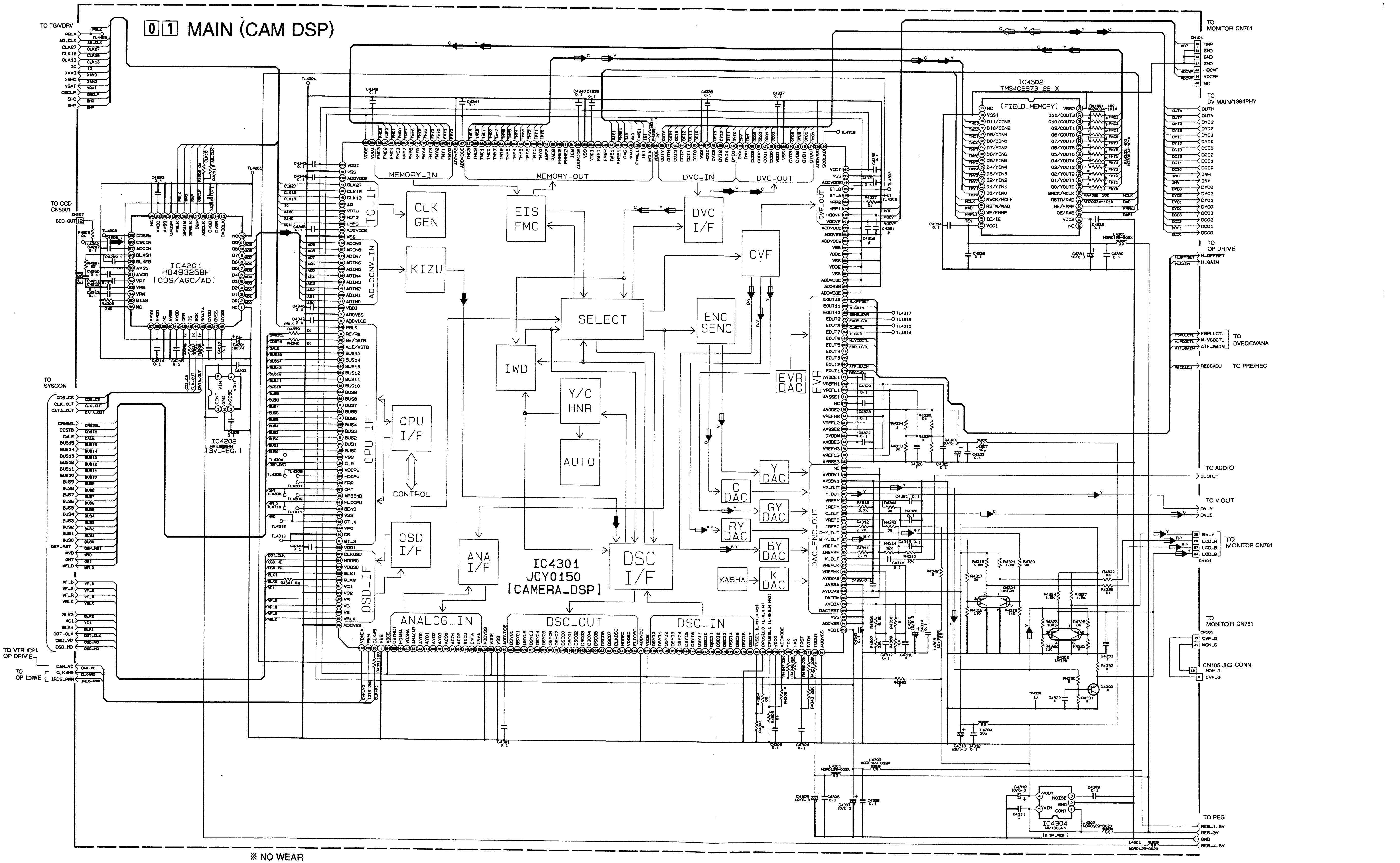
※ NO WEAR

4.12 V OUT SCHEMATIC DIAGRAM


0
1
MAIN [V OUT]
TO REG
REG_4.8V
GND
L3701
10μ
C3701
10/6.3
C3707
0.1
IC3701
BA7665FS
Mute
Chroma Mute
R3703
4.7k
C3708
1
C3702
150p
R3702
240
Q3701
UMT2N
R3701
240
C3703
33p
C3709
0.01
R3708
4.7k
C3704
100p
R3707
220
Q3701
R3724
3.9k
R3706
220
C3705
33p
C3706
0.01
TO CAM DSP
DV_Y
DV_C
Y
C
6dB
75Ω
20k
R3723
4.7k
C3713
330/4
R3711
68
C3712
100/4
R3712
68
C3711
22/4
C3710
0.01
R3713
68
D3701
※
R3716
※
Q3702
UMZ1N
R3714
12k
R3715
10k
C3715
※
R3717
560
R3718
560
R3719
10k
TO
JACK CN502
CN103
9 Y_OUT
8 S_DET
7 C_OUT
6 GND
5 GND
1 V_OUT
TO SYSCON
ASPECT1
ASPECT2
S_DC_IN
S_DET

※ NO WEAR

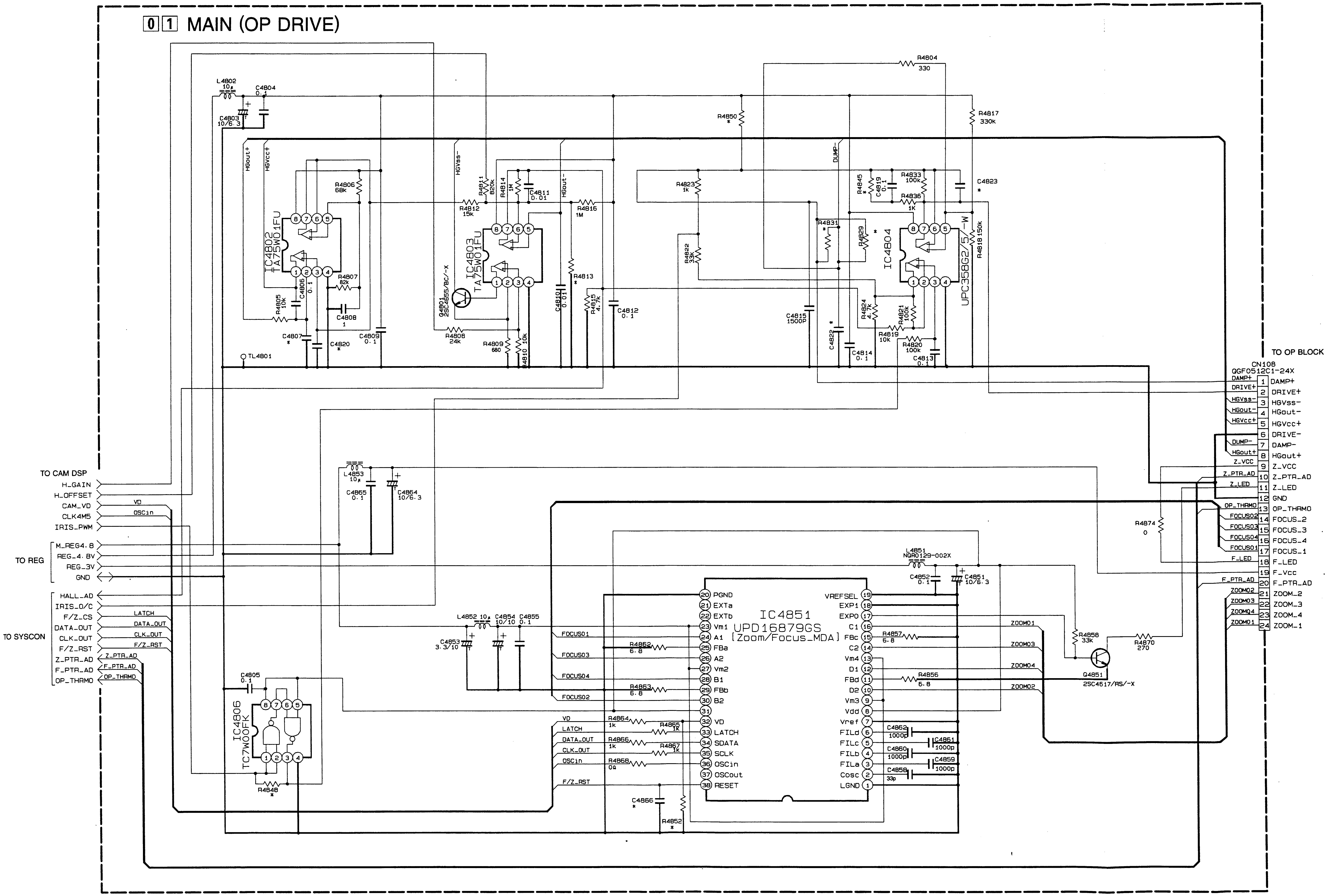
4.13 CAM DSP SCHEMATIC DIAGRAM



01 MAIN (CAM DSP)
TO TG/VDRV
TO CCD CN5001
TO SYSCON
TO VTR CPU, OP DRIVE
TO OP DRIVE
IC4201
HD49326BF
[CDS/AGC/AD]
IC4202
MM1385HN
[3V_REG.]
IC4301
JCY0150
[CAMERA_DSP]
TG_IF
AD_CONV_IN
CPU_IF
OSD_IF
CLK GEN
KIZU
CPU I/F
CONTROL
OSD I/F
ANA I/F
EIS FMC
SELECT
IWD
Y/C HNR
AUTO
DSC I/F
DVC I/F
CVF
ENC SENC
EVR DAC
Y DAC
C DAC
GY DAC
RY DAC
BY DAC
KASHA
K DAC
MEMORY_IN
MEMORY_OUT
DVC_IN
DVC_OUT
CVF_OUT
EVR
DAC_ENC_OUT
ANALOG_IN
DSC_OUT
DSC_IN
IC4302
TMS4C2973-28-X
[FIELD_MEMORY]
IC4304
MM1385NN
[2.8V_REG.]
TO MONITOR CN761
TO DV MAIN/1394PHY
TO OP DRIVE
TO DVEQ/DVANA
TO PRE/REC
TO AUDIO
TO V OUT
TO MONITOR CN761
TO MONITOR CN761
CN105 JIG CONN.
TO REG

※ NO WEAR

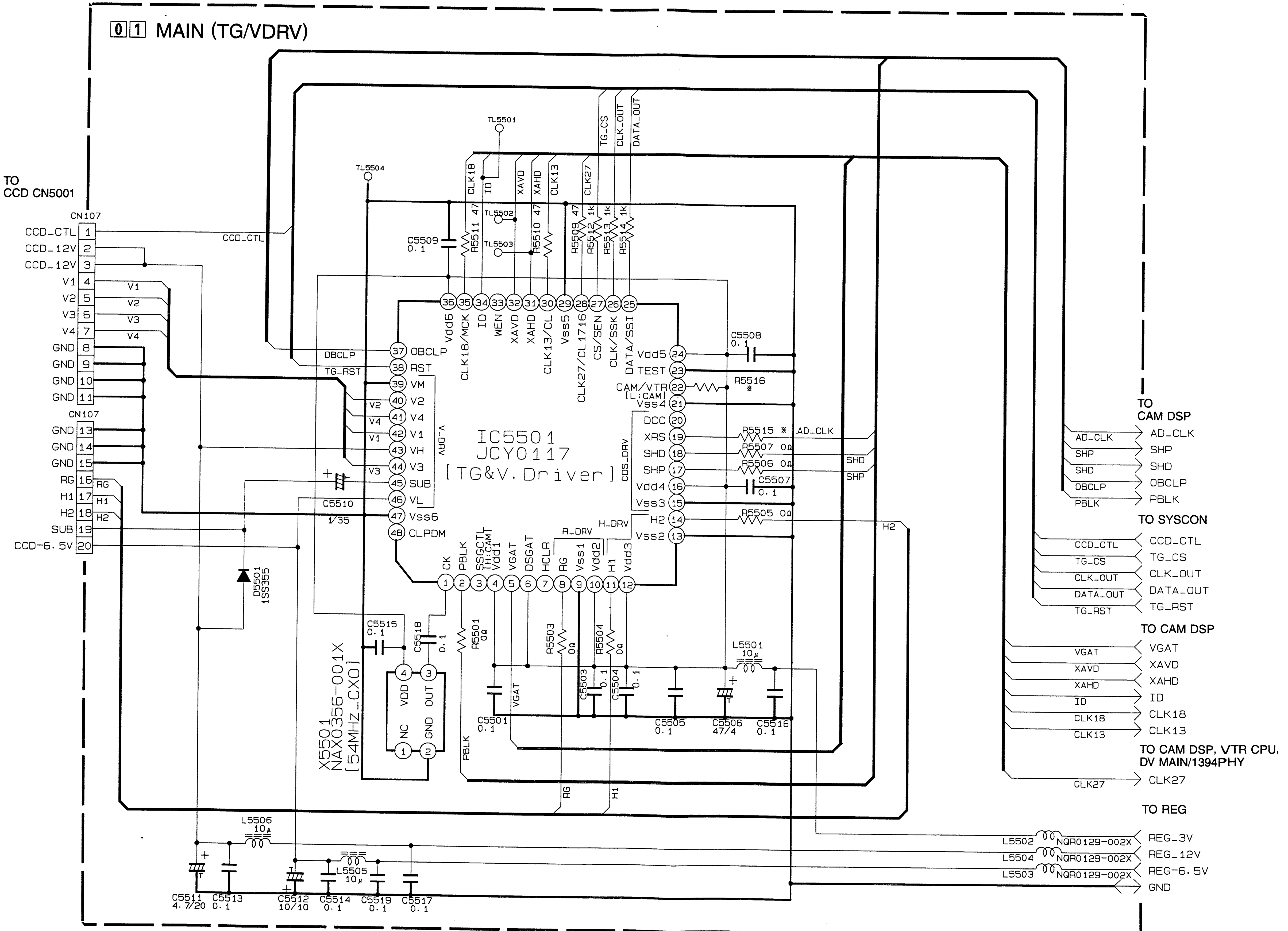
4.14 OP DRIVE SCHEMATIC DIAGRAM



0 1 MAIN (OP DRIVE)
TO CAM DSP
H_GAIN
H_OFFSET
CAM_VD
CLK4M5
IRIS_PWM
TO REG
M_REG4.8
REG_4.8V
REG_3V
GND
TO SYSCON
HALL_AD
IRIS_O/C
F/Z_CS
DATA_OUT
CLK_OUT
F/Z_RST
Z_PTR_AD
F_PTR_AD
OP_THRMO
VD
OSCin
LATCH
DATA_OUT
CLK_OUT
F/Z_RST
Z_PTR_AD
F_PTR_AD
OP_THRMO
L4802 10μ
C4804 0.1
C4803 10/6.3
HGout+
HGVcc+
R4806 68k
IC4802 TA75W01FU
R4807 82k
R4805 10k
C4806 0.1
C4808 1
C4807 *
C4820 *
C4809 0.1
TL4801
HGVss-
R4811 820k
R4814 1M
C4811 0.01
HGout-
R4812 15k
R4816 1M
IC4803 TA75W01FU
Q4801 2SC4655/BC/-X
R4808 24K
R4809 680
R4810 10k
C4810 0.01
R4813 *
R4815 4.7K
C4812 0.1
R4804 330
R4850 *
R4817 330K
DUMP-
R4823 1k
R4822 33K
R4845 *
C4819 0.1
R4833 100K
R4836 1K
C4823 *
R4831 *
R4829 *
IC4804 UPC358G2/5-W
R4818 150k
C4815 1500P
C4822 *
C4814 0.1
R4824 4.7K
R4821 100K
R4819 10K
R4820 100K
C4813 0.1
TO OP BLOCK
CN108 QGF0512C1-24X
1 DAMP+
2 DRIVE+
3 HGVss-
4 HGout-
5 HGVcc+
6 DRIVE-
7 DAMP-
8 HGout+
9 Z_VCC
10 Z_PTR_AD
11 Z_LED
12 GND
13 OP_THRMO
14 FOCUS_2
15 FOCUS_3
16 FOCUS_4
17 FOCUS_1
18 F_LED
19 F_Vcc
20 F_PTR_AD
21 ZOOM_2
22 ZOOM_3
23 ZOOM_4
24 ZOOM_1
DAMP+
DRIVE+
HGVss-
HGout-
HGVcc+
DUMP-
HGout+
Z_VCC
Z_PTR_AD
Z_LED
OP_THRMO
FOCUS02
FOCUS03
FOCUS04
FOCUS01
F_LED
F_PTR_AD
ZOOM02
ZOOM03
ZOOM04
ZOOM01
L4853 10μ
C4865 0.1
C4864 10/6.3
R4874 0
L4851 NQR0129-002X
C4852 0.1
C4851 10/6.3
L4852 10μ
C4854 10/10
C4855 0.1
C4853 3.3/10
FOCUS01
FOCUS03
FOCUS04
FOCUS02
R4862 6.8
R4863 6.8
IC4851 UPD16879GS [Zoom/Focus_MDA]
20 PGND
21 EXTa
22 EXTb
23 Vm1
24 A1
25 FBa
26 A2
27 Vm2
28 B1
29 FBb
30 B2
31
32 VD
33 LATCH
34 SDATA
35 SCLK
36 OSCin
37 OSCout
38 RESET
VREFSEL 19
EXP1 18
EXP0 17
C1 16
FBc 15
C2 14
Vm4 13
D1 12
FBd 11
D2 10
Vm3 9
Vdd 8
Vref 7
FILd 6
FILc 5
FILb 4
FILa 3
Cosc 2
LGND 1
R4857 6.8
R4856 6.8
ZOOM01
ZOOM03
ZOOM04
ZOOM02
R4858 33k
R4870 270
Q4851 2SC4617/RS/-X
VD
LATCH
DATA_OUT
CLK_OUT
OSCin
F/Z_RST
R4864 1k
R4865 1k
R4866 1k
R4867 1k
R4868 0Ω
C4862 1000p
C4861 1000p
C4860 1000p
C4859 1000p
C4858 33p
C4866 *
R4852 *
C4805 0.1
IC4806 TC7W00FK
R4848 *

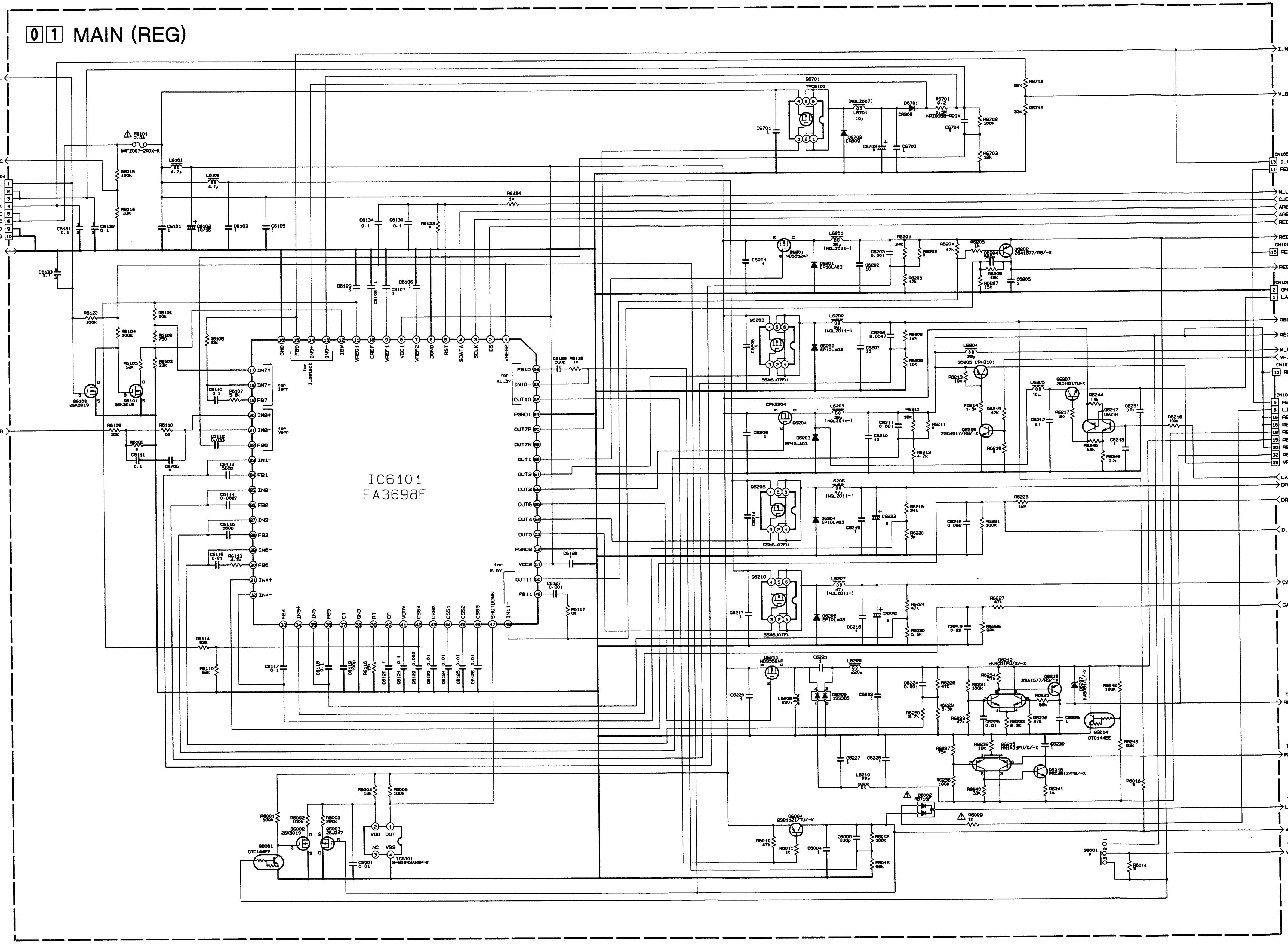
* NO WEAR

4.15 TG/VDRV SCHEMATIC DIAGRAM


01 MAIN (TG/VDRV)
TO CCD CN5001
CN107
CCD_CTL 1
CCD_12V 2
CCD_12V 3
V1 4
V2 5
V3 6
V4 7
GND 8
GND 9
GND 10
GND 11
GND 13
GND 14
GND 15
RG 16
H1 17
H2 18
SUB 19
CCD-6.5V 20
IC5501
JCY0117
[TG&V.Driver]
V_DRV
CDS_DRV
R_DRV
H_DRV
Vdd6 36
CLK18/MCK 35
ID 34
WEN 33
XAVD 32
XAHD 31
CLK13/CL 30
Vss5 29
CLK27/CL1716 28
CS/SEN 27
CLK/SSK 26
DATA/SSI 25
Vdd5 24
TEST 23
CAM/VTR [L:CAM] 22
Vss4 21
DCC 20
XRS 19
SHD 18
SHP 17
Vdd4 16
Vss3 15
H2 14
Vss2 13
OBCLP 37
RST 38
VM 39
V2 40
V4 41
V1 42
VH 43
V3 44
SUB 45
VL 46
Vss6 47
CLPDM 48
CK 1
PBLK 2
SSGCTL [H:CAM] 3
Vdd1 4
VGAT 5
DSGAT 6
HCLR 7
RG 8
Vss1 9
Vdd2 10
H1 11
Vdd3 12
TL5501
TL5502
TL5503
TL5504
C5509 0.1
R5511 47
R5510 47
R5509 47
R5512 1k
R5513 1k
R5514 1k
TG_CS
CLK_OUT
DATA_OUT
CLK18
ID
XAVD
XAHD
CLK13
CLK27
C5508 0.1
R5516 ※
R5515 ※
AD_CLK
R5507 0Ω
R5506 0Ω
C5507 0.1
R5505 0Ω
SHD
SHP
H2
OBCLP
TG_RST
C5510 1/35
D5501 1SS355
C5515 0.1
C5518 0.1
X5501
NAX0356-001X
[54MHz_CXO]
VDD
OUT
NC
GND
R5501 0Ω
R5503 0Ω
R5504 0Ω
C5501 0.1
C5503 0.1
C5504 0.1
C5505 0.1
C5506 47/4
C5516 0.1
L5501 10μ
VGAT
PBLK
RG
H1
L5506 10μ
L5505 10μ
C5511 4.7/20
C5513 0.1
C5512 10/10
C5514 0.1
C5519 0.1
C5517 0.1
TO CAM DSP
AD_CLK
SHP
SHD
OBCLP
PBLK
TO SYSCON
CCD_CTL
TG_CS
CLK_OUT
DATA_OUT
TG_RST
TO CAM DSP
VGAT
XAVD
XAHD
ID
CLK18
CLK13
TO CAM DSP, VTR CPU, DV MAIN/1394PHY
CLK27
TO REG
L5502 NQR0129-002X
L5504 NQR0129-002X
L5503 NQR0129-002X
REG_3V
REG_12V
REG-6.5V
GND

※ NO WEAR

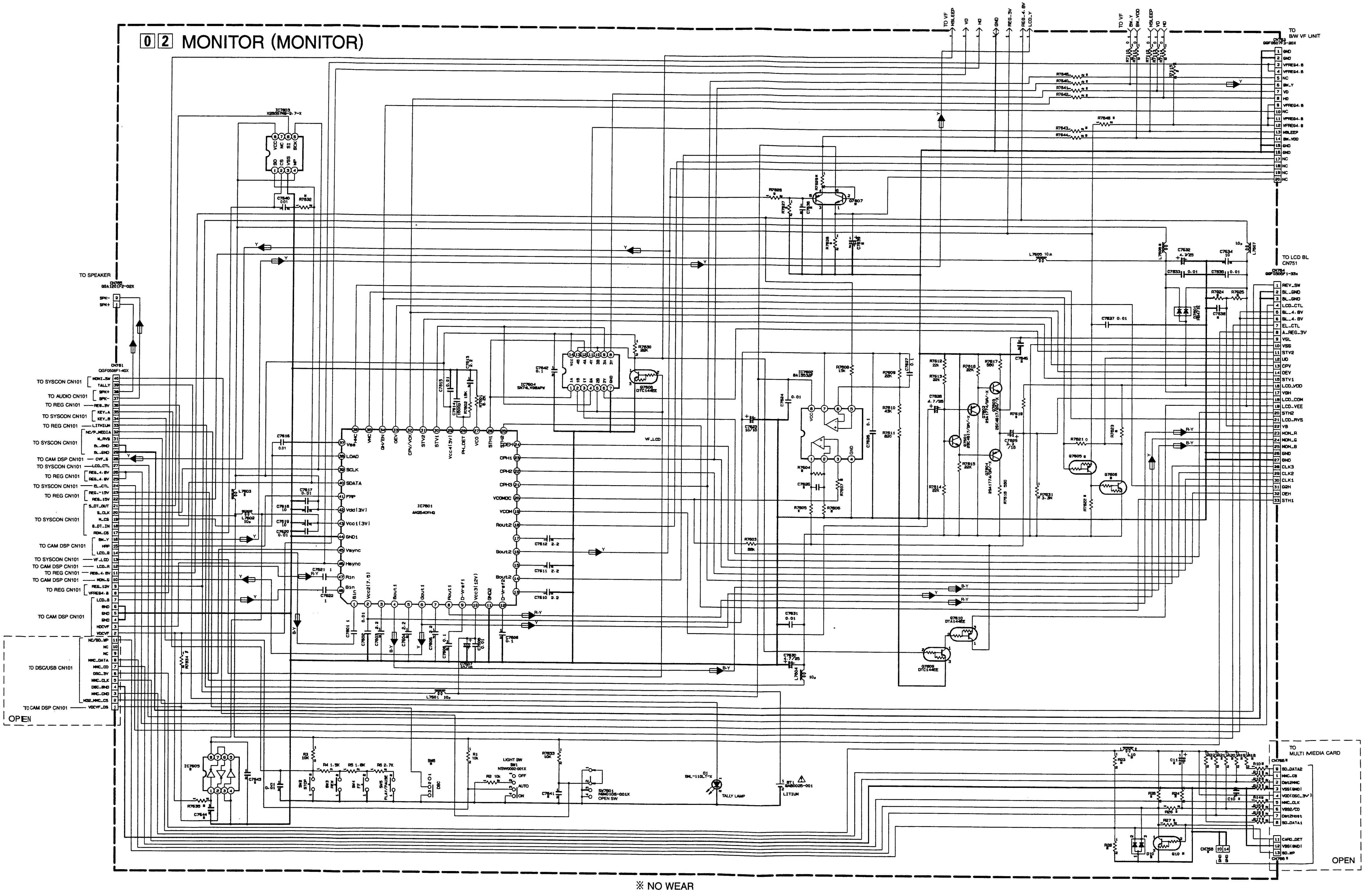
4.16 REG SCHEMATIC DIAGRAM



01 MAIN (REG)
TO SYSCON
B_SEL
TO SYSCON
V_DC
CN104
B_SEL 1
BATT_+ 2
BATT_+ 3
BATT_CHK 4
ADP_DC 5
ADP_DC 6
GND 9
GND 10
TO REAR UNIT
GND
TO SYSCON, VTR CPU, MDA, AUDIO, ANR, DV MAIN/1394PHY, DVEQ/DVANA, V OUT, PC IF, CAM DSP, TG/VDRV, OP DRIVE
TO SYSCON
CHRG_EVR
F6101
L6101
L6102
Q6101 2SK3019
Q6102 2SK3019
IC6101
FA3698F
Q6701 TPC6102
L6701
Q6201 ND5332AP
L6201
Q6202 2SA1577/RS/-X
Q6203 SSM6J07FU
L6202
Q6204 CPH3304
L6203
L6204
Q6205 CPH3101
Q6206 2SC4617/RS/-X
Q6207 2SD1621/TU/-X
Q6208 SSM6J07FU
L6205
Q6210 SSM6J07FU
L6207
Q6211 ND5332AP
L6208
L6209
L6210
Q6212 HN1C01FU/G/-X
Q6213 2SA1577/RS/-X
Q6214 DTC144EE
Q6215 HN1A01FU/G/-X
Q6216 2SC4617/RS/-X
Q6001 DTC144EE
Q6002 2SK3019
Q6003 2SJ347
IC6001 S-80842ANMP-W
Q6004 2SB1121/TU/-X
F6002
I_MTR
V_BATT
TO SYSCON
CN105
13 I_MTR
11 REG_3V
JIG CONN.
M_UNREG — TO MDA
CJIG_RST
AREG_SO
AREG_CLK
REG_CS
TO SYSCON
REG_3V
TO SYSCON, ANR, AUDIO, DVEQ/DVANA, DV MAIN/1394PHY, PRE/REC, MDA, VTR CPU, CAM DSP, TG/VDRV, OP DRIVE
CN109
15 REG_3V
TO ZOOM UNIT
REG_2.2V — TO DVEQ/DVANA, DV MAIN/1394PHY
CN102
2 GND
1 LAMP_4.5V
TO JACK CN501
REG_1.8V
TO CAM DSP, DV MAIN/1394PHY
REG_4.8V
TO AUDIO, MDA, DVEQ/DVANA, V OUT, CAM DSP, OP DRIVE
M_REG4.8 — TO AUDIO, MDA, OP DRIVE
VF_CTL — TO SYSCON
CN103
13 REG_4.8V
TO JACK CN502
CN101
5 REG_3V
6 LITHIUM
15 REG_4.8V
16 REG_4.8V
18 REG_-15V
19 REG_15V
30 REG_4.8V
32 REG_12V
33 VFREG4.8
TO MONITOR CN761
LAMP_ON — TO SYSCON
DRUM_PWR
DRUM_ERR
D_GAIN
CAP_PWR
CAP_ERR
TO VTR CPU
TO TG/VDRV
REG_12V
TO TG/VDRV
REG-5.5V
TO SYSCON
LIT_3V
AL_3V
TO VTR CPU
VPPD

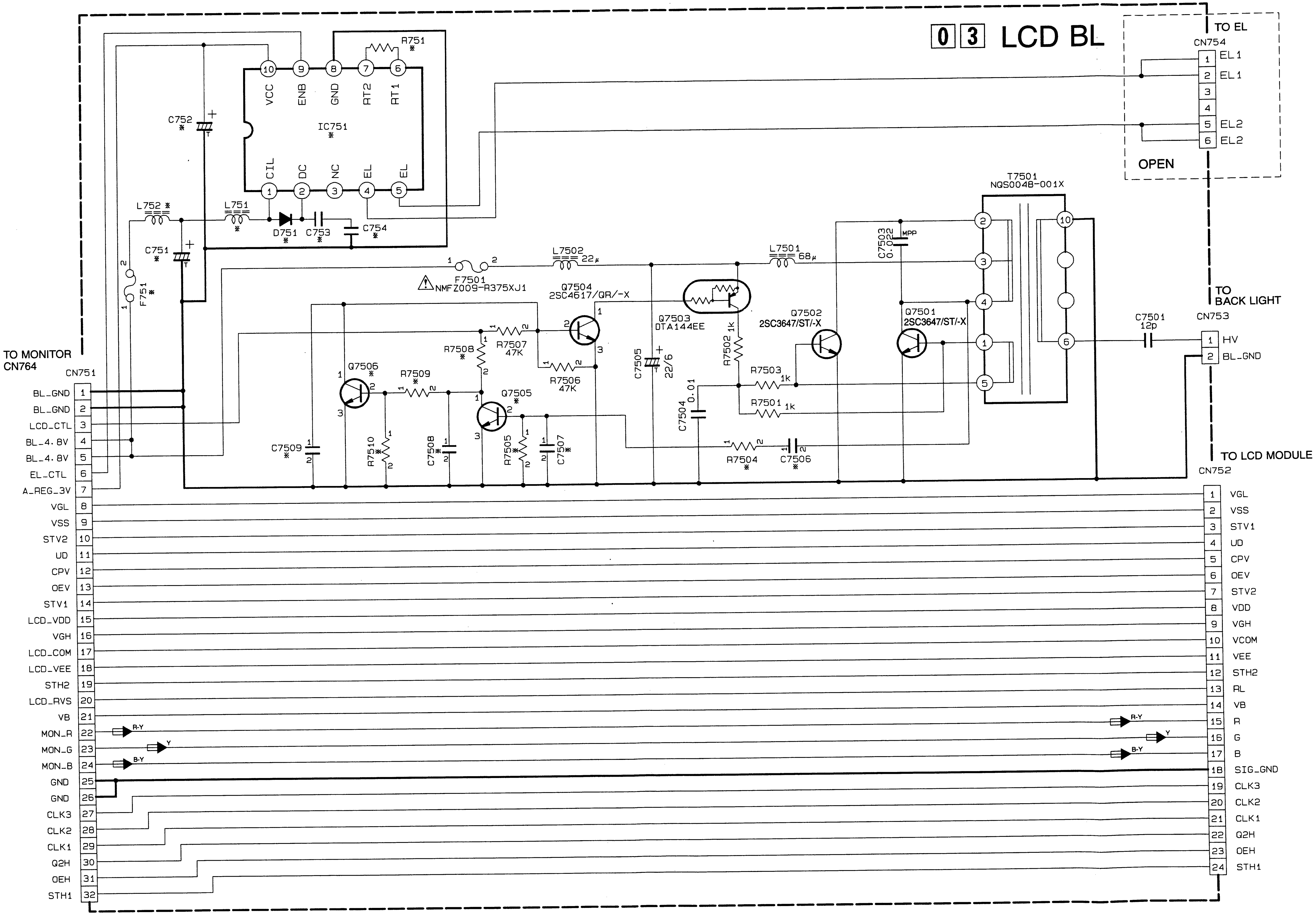
※ NO WEAR

4.17 MONITOR SCHEMATIC DIAGRAM



0 2 MONITOR (MONITOR)
TO SPEAKER
TO SYSCON CN101
TO AUDIO CN101
TO REG CN101
TO CAM DSP CN101
TO DSC/USB CN101
OPEN
IC7601
AN2540FHQ
IC7604
SN74LV08APW
TO B/W VF UNIT
TO LCD BL
CN751
TO MULTI MEDIA CARD
TALLY LAMP
LITHIUM
LIGHT SW
OPEN SW
OPEN
※ NO WEAR

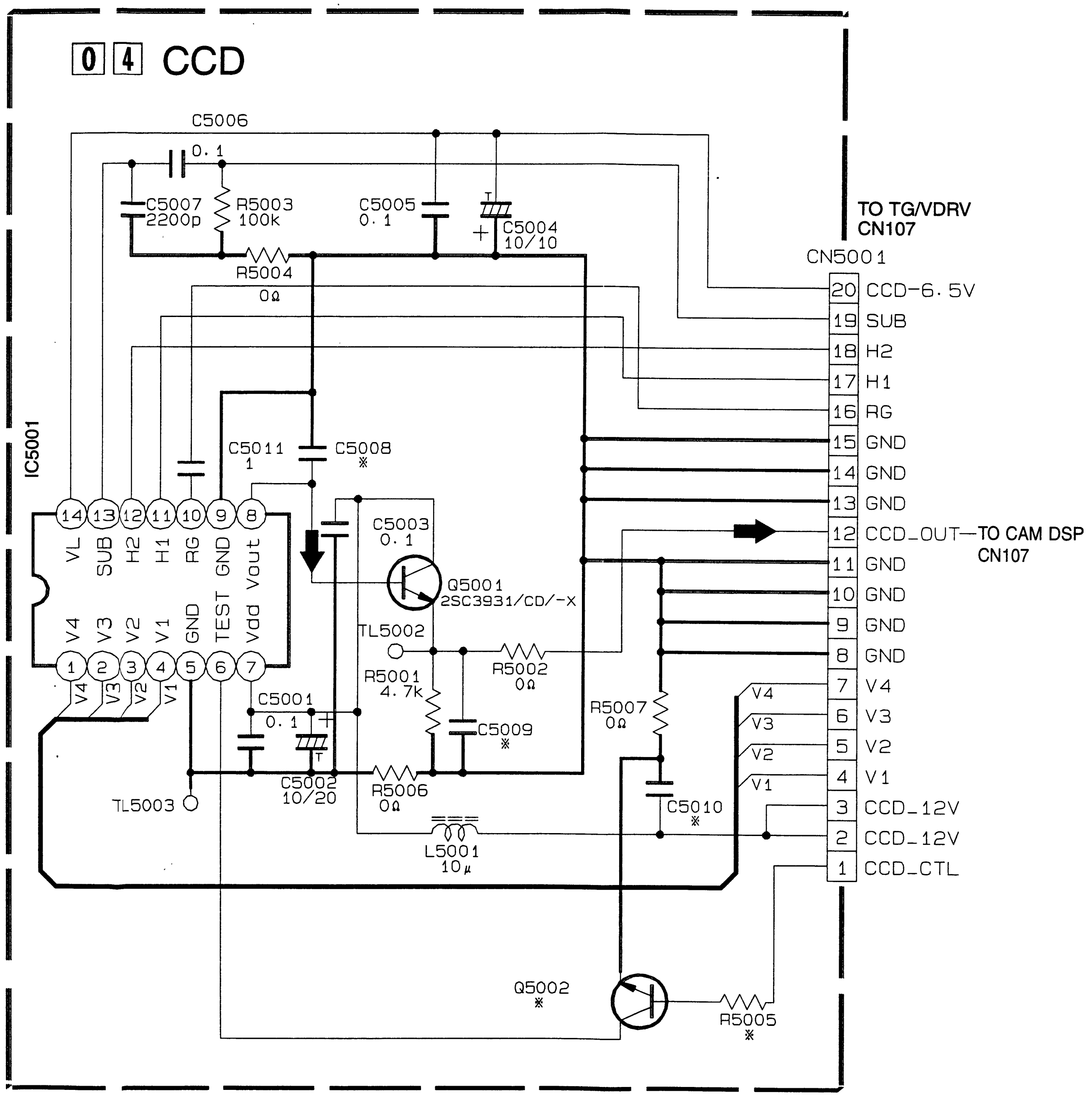
4.18 LCD BL SCHEMATIC DIAGRAM



03 LCD BL
TO EL
CN754
1 EL1
2 EL1
3
4
5 EL2
6 EL2
OPEN
TO BACK LIGHT
CN753
1 HV
2 BL_GND
TO LCD MODULE
CN752
1 VGL
2 VSS
3 STV1
4 UD
5 CPV
6 OEV
7 STV2
8 VDD
9 VGH
10 VCOM
11 VEE
12 STH2
13 RL
14 VB
15 R
16 G
17 B
18 SIG_GND
19 CLK3
20 CLK2
21 CLK1
22 Q2H
23 OEH
24 STH1
TO MONITOR
CN764
CN751
BL_GND 1
BL_GND 2
LCD_CTL 3
BL_4.8V 4
BL_4.8V 5
EL_CTL 6
A_REG_3V 7
VGL 8
VSS 9
STV2 10
UD 11
CPV 12
OEV 13
STV1 14
LCD_VDD 15
VGH 16
LCD_COM 17
LCD_VEE 18
STH2 19
LCD_RVS 20
VB 21
MON_R 22
MON_G 23
MON_B 24
GND 25
GND 26
CLK3 27
CLK2 28
CLK1 29
Q2H 30
OEH 31
STH1 32
R-Y
Y
B-Y
IC751 ※
VCC ENB GND RT2 RT1
CIL DC NC EL EL
R751 ※
C752 ※
L752 ※
L751 ※
D751 ※
C753 ※
C754 ※
C751 ※
F751 ※
F7501
NMFZ009-R375XJ1
L7502 22μ
L7501 68μ
T7501
NQS004B-001X
C7503 0.022 MPP
C7501 12p
Q7504
2SC4617/QR/-X
Q7503
DTA144EE
Q7502
2SC3647/ST/-X
Q7501
2SC3647/ST/-X
Q7506 ※
Q7505 ※
R7507 47K
R7508 ※
R7506 47K
R7509 ※
R7510 ※
R7505 ※
R7502 1k
R7503 1k
R7501 1k
R7504 ※
C7505 22/6
C7504 0.01
C7506 ※
C7507 ※
C7508 ※
C7509 ※

※ NO WEAR

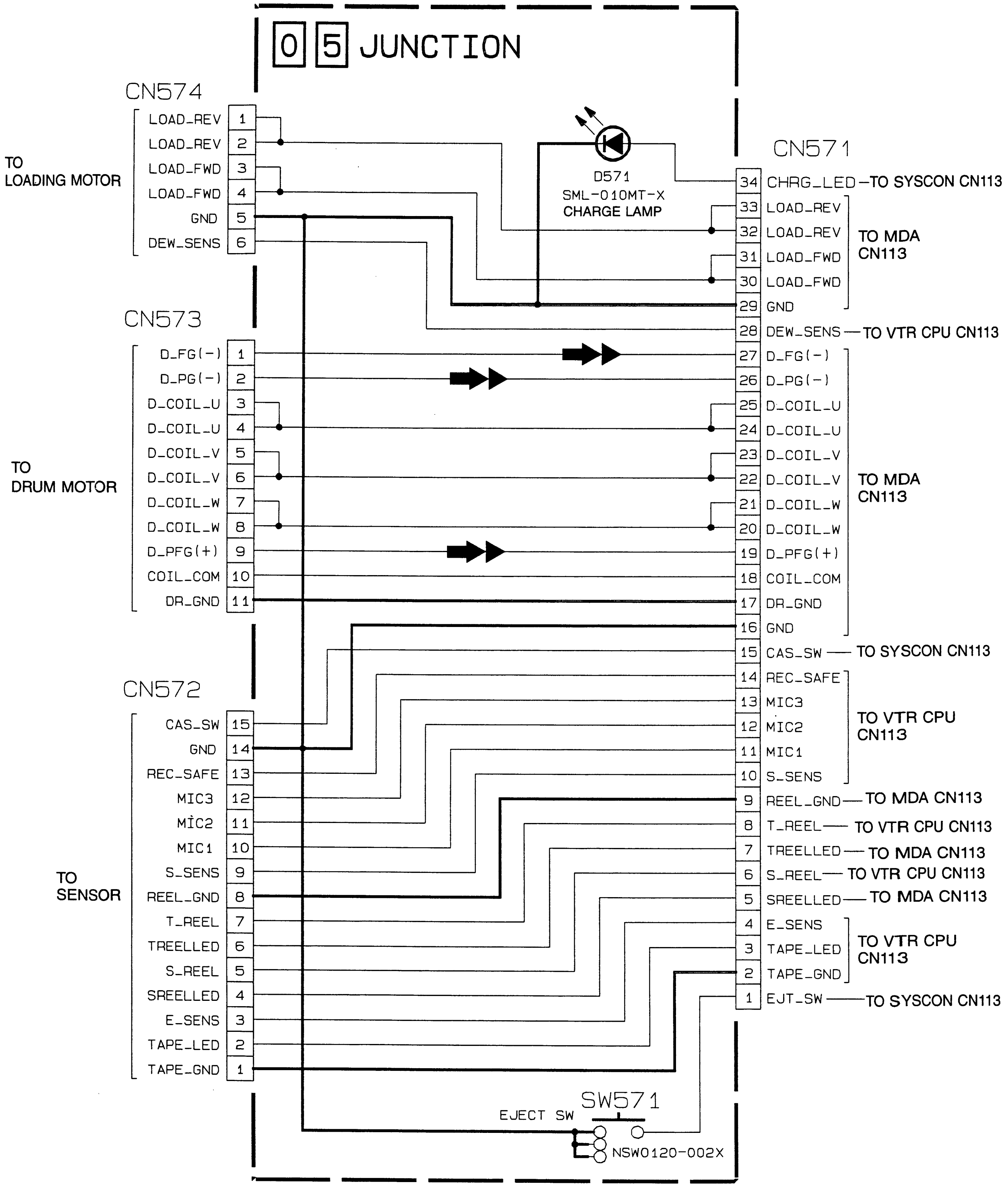
4.19 CCD SCHEMATIC DIAGRAM



0 4 CCD
C5006
0.1
C5007 2200p
R5003 100k
C5005 0.1
C5004 10/10
R5004 0Ω
TO TG/VDRV CN107
CN5001
20 CCD-6.5V
19 SUB
18 H2
17 H1
16 RG
15 GND
14 GND
13 GND
12 CCD_OUT—TO CAM DSP CN107
11 GND
10 GND
9 GND
8 GND
7 V4
6 V3
5 V2
4 V1
3 CCD_12V
2 CCD_12V
1 CCD_CTL
IC5001
VL SUB H2 H1 RG GND Vout
V4 V3 V2 V1 GND TEST Vdd
C5011 1
C5008 ※
C5003 0.1
Q5001 2SC3931/CD/-X
TL5002
R5001 4.7k
R5002 0Ω
C5001 0.1
C5002 10/20
C5009 ※
R5006 0Ω
R5007 0Ω
C5010 ※
L5001 10μ
TL5003
Q5002 ※
R5005 ※
V4
V3
V2
V1

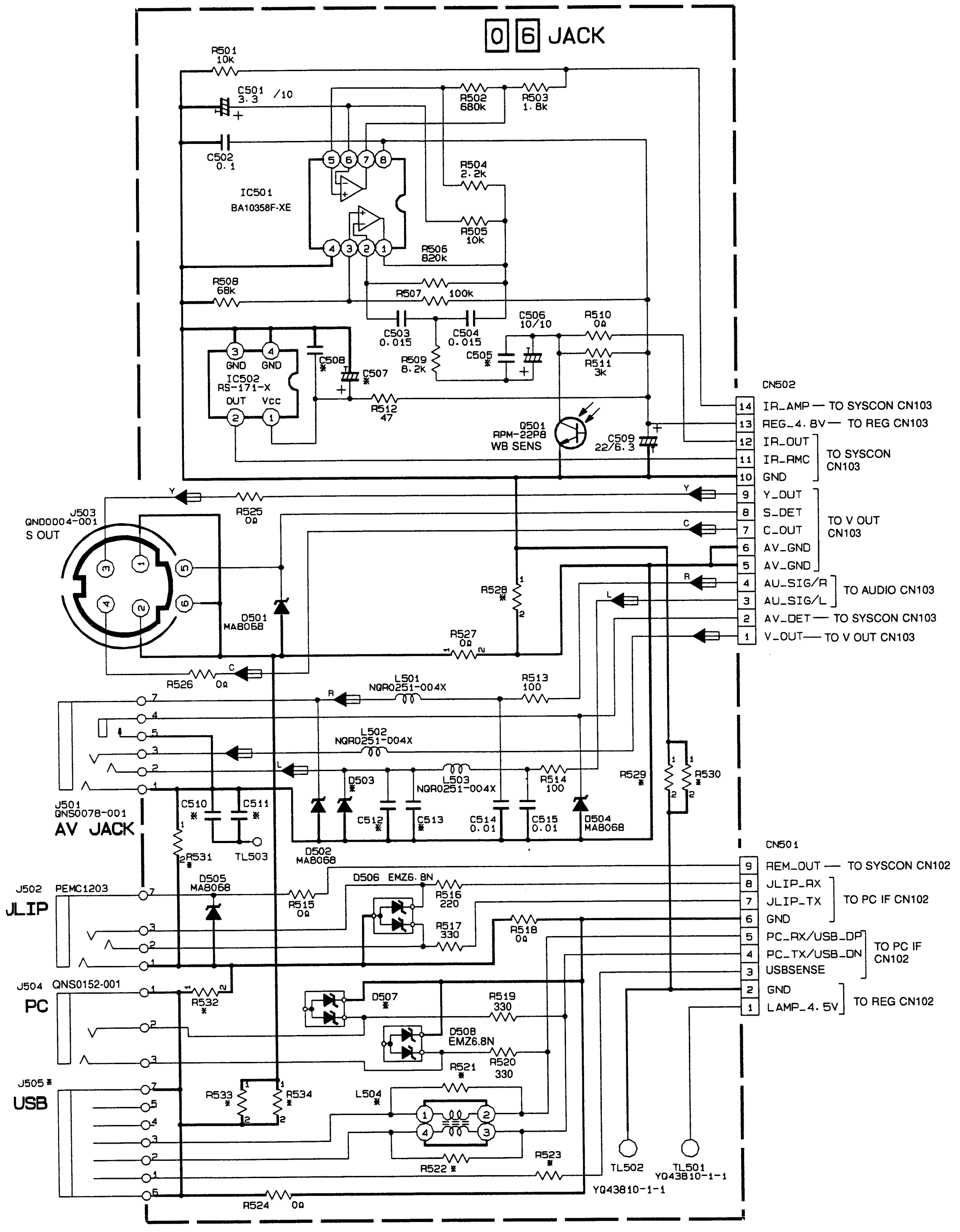
※ NOWEAR

4.20 JUNCTION SCHEMATIC DIAGRAM



0 5 JUNCTION
CN574
TO LOADING MOTOR
1 LOAD_REV
2 LOAD_REV
3 LOAD_FWD
4 LOAD_FWD
5 GND
6 DEW_SENS
D571 SML-010MT-X CHARGE LAMP
CN571
34 CHRG_LED—TO SYSCON CN113
33 LOAD_REV
32 LOAD_REV
31 LOAD_FWD
30 LOAD_FWD
29 GND
TO MDA CN113
28 DEW_SENS—TO VTR CPU CN113
CN573
TO DRUM MOTOR
1 D_FG(-)
2 D_PG(-)
3 D_COIL_U
4 D_COIL_U
5 D_COIL_V
6 D_COIL_V
7 D_COIL_W
8 D_COIL_W
9 D_PFG(+)
10 COIL_COM
11 DR_GND
27 D_FG(-)
26 D_PG(-)
25 D_COIL_U
24 D_COIL_U
23 D_COIL_V
22 D_COIL_V
21 D_COIL_W
20 D_COIL_W
19 D_PFG(+)
18 COIL_COM
17 DR_GND
16 GND
TO MDA CN113
15 CAS_SW — TO SYSCON CN113
14 REC_SAFE
13 MIC3
12 MIC2
11 MIC1
10 S_SENS
TO VTR CPU CN113
9 REEL_GND—TO MDA CN113
8 T_REEL—TO VTR CPU CN113
7 TREELLED—TO MDA CN113
6 S_REEL—TO VTR CPU CN113
5 SREELLED—TO MDA CN113
4 E_SENS
3 TAPE_LED
2 TAPE_GND
TO VTR CPU CN113
1 EJT_SW—TO SYSCON CN113
CN572
TO SENSOR
15 CAS_SW
14 GND
13 REC_SAFE
12 MIC3
11 MIC2
10 MIC1
9 S_SENS
8 REEL_GND
7 T_REEL
6 TREELLED
5 S_REEL
4 SREELLED
3 E_SENS
2 TAPE_LED
1 TAPE_GND
SW571
EJECT SW
NSW0120-002X

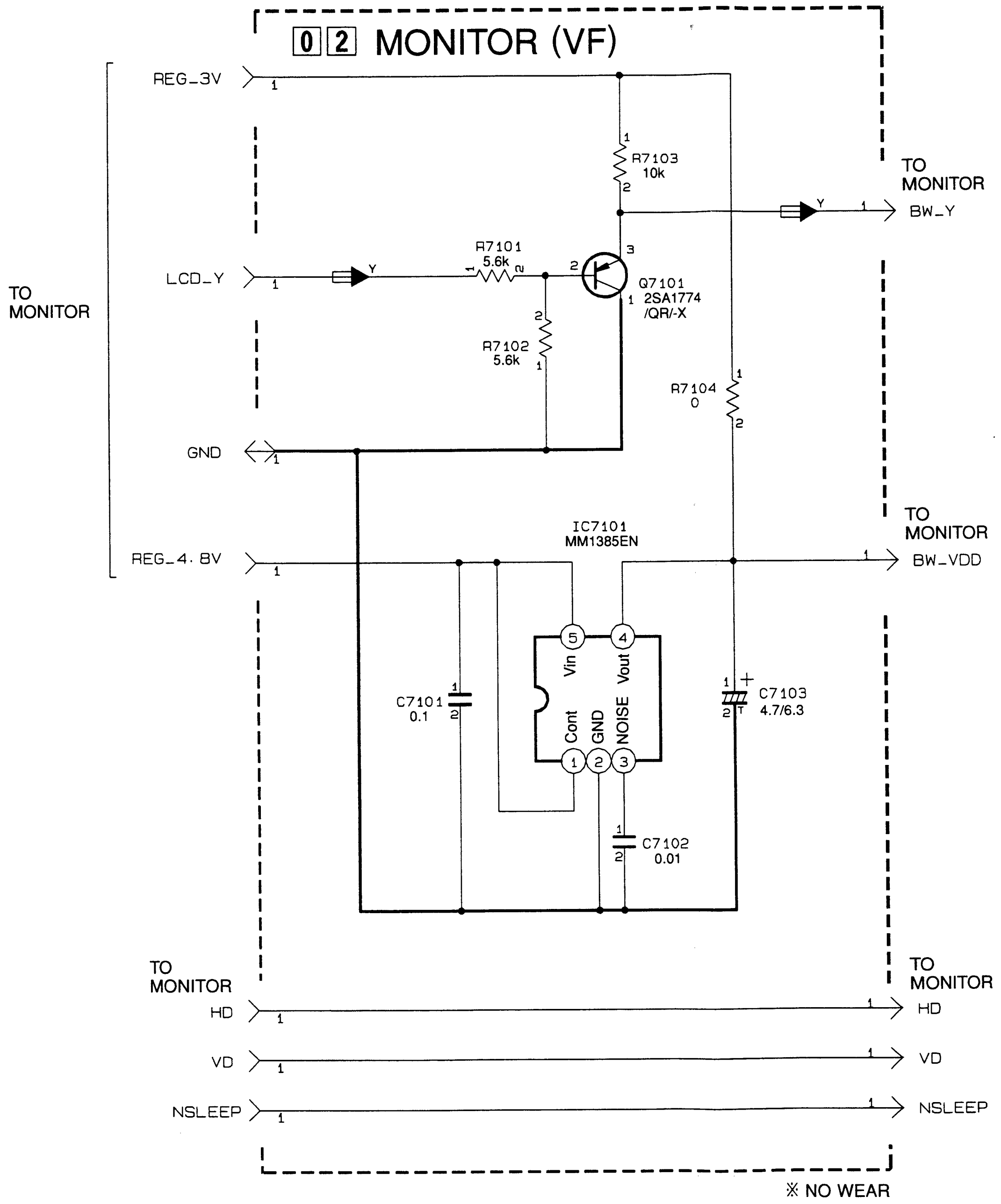
4.21 VF SCHEMATIC DIAGRAM



06 JACK
R501 10k
C501 3.3 /10
R502 680k
R503 1.8k
C502 0.1
IC501 BA10358F-XE
R504 2.2k
R505 10k
R506 820k
R508 68k
R507 100k
C503 0.015
C504 0.015
C506 10/10
R510 0Ω
R509 8.2k
C505
R511 3k
IC502 RS-171-X
GND GND OUT Vcc
C508
C507
R512 47
Q501 RPM-22PB WB SENS
C509 22/6.3
CN502
14 IR_AMP — TO SYSCON CN103
13 REG_4.8V — TO REG CN103
12 IR_OUT
11 IR_RMC
10 GND
TO SYSCON CN103
9 Y_OUT
8 S_DET
7 C_OUT
6 AV_GND
5 AV_GND
TO V OUT CN103
4 AU_SIG/R
3 AU_SIG/L
TO AUDIO CN103
2 AV_DET — TO SYSCON CN103
1 V_OUT — TO V OUT CN103
J503 QND0004-001 S OUT
R525 0Ω
D501 MA8068
R528
R527 0Ω
R526 0Ω
L501 NQR0251-004X
R513 100
L502 NQR0251-004X
L503 NQR0251-004X
R514 100
D503
R529
R530
C510
C511
C512
C513
C514 0.01
C515 0.01
D504 MA8068
J501 QNS0078-001
AV JACK
R531
TL503
D502 MA8068
J502 PEMC1203
JLIP
D505 MA8068
R515 0Ω
D506 EMZ6.8N
R516 220
R517 330
R518 0Ω
CN501
9 REM_OUT — TO SYSCON CN102
8 JLIP_RX
7 JLIP_TX
6 GND
TO PC IF CN102
5 PC_RX/USB_DP
4 PC_TX/USB_DN
3 USBSENSE
TO PC IF CN102
2 GND
1 LAMP_4.5V
TO REG CN102
J504 QNS0152-001
PC
R532
D507
R519 330
D508 EMZ6.8N
R520 330
R521
J505
USB
R533
R534
L504
R522
R523
TL502
TL501 YQ43810-1-1
YQ43810-1-1
R524 0Ω

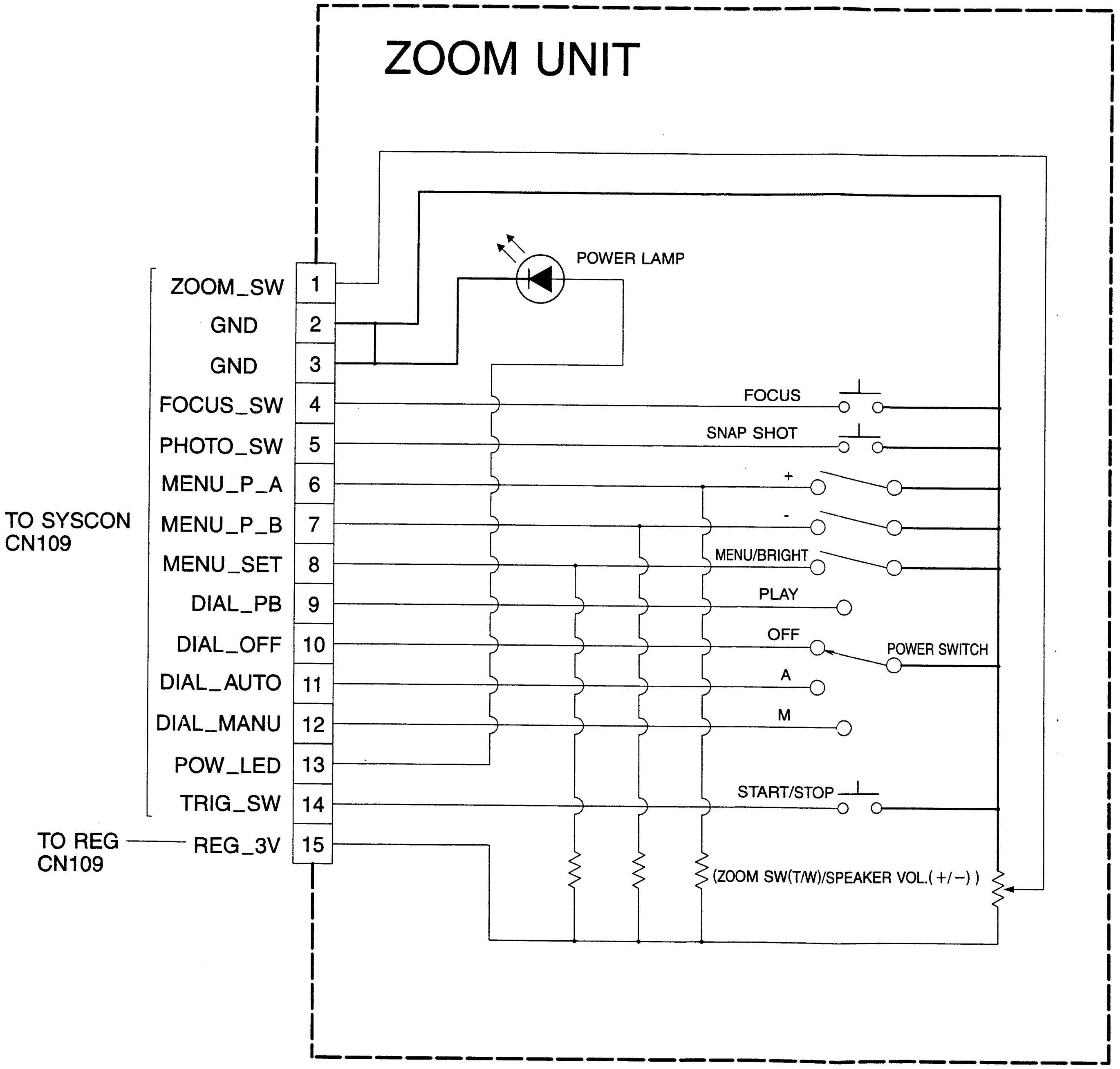
※ NO WEAR

4.22 JACK SCHEMATIC DIAGRAM

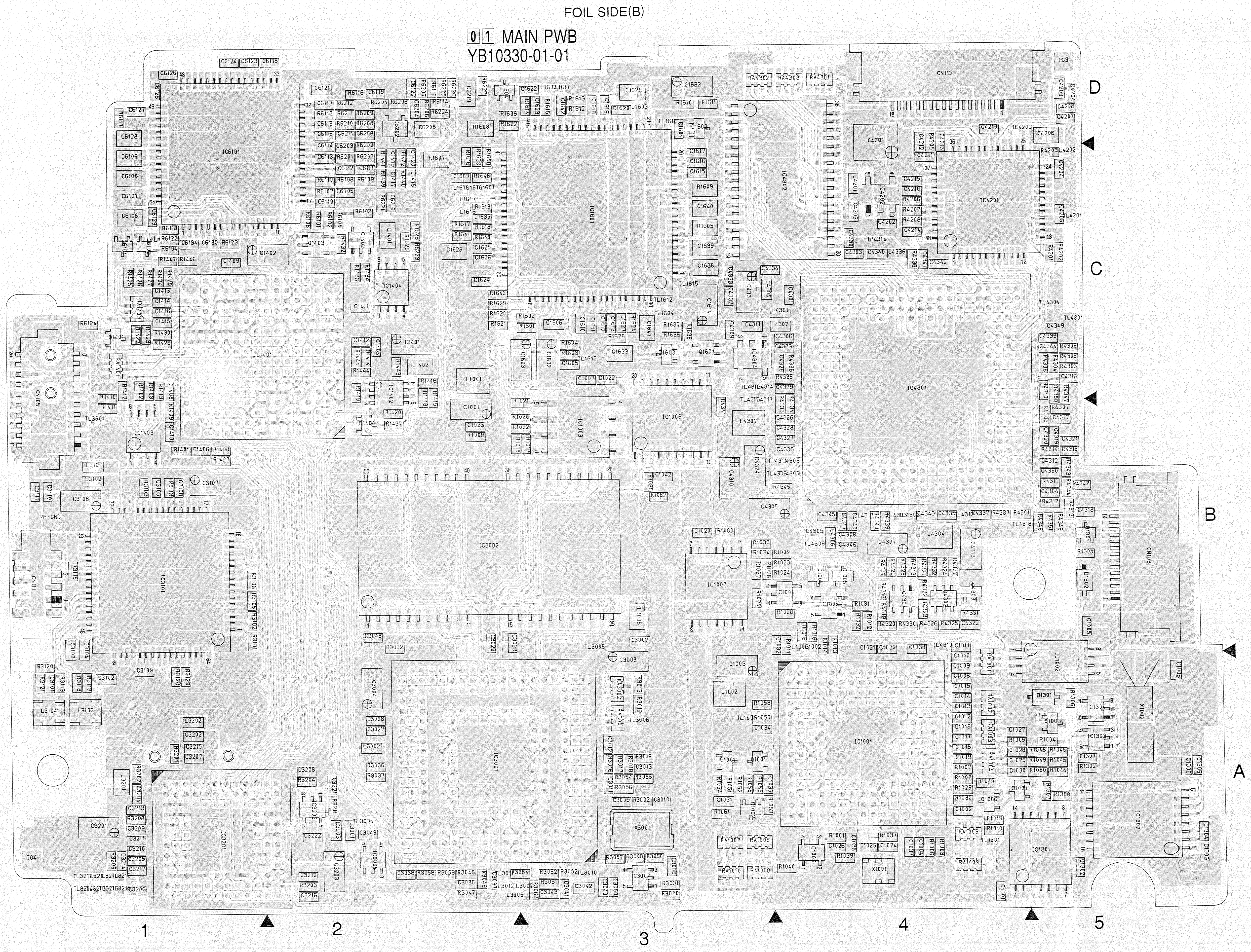


02 MONITOR (VF)
REG_3V
R7103 10k
TO MONITOR BW_Y
TO MONITOR
LCD_Y
R7101 5.6k
Q7101 2SA1774 /QR/-X
R7102 5.6k
R7104 0
GND
IC7101 MM1385EN
TO MONITOR BW_VDD
REG_4.8V
Vin
Vout
Cont
GND
NOISE
C7101 0.1
C7103 4.7/6.3
C7102 0.01
TO MONITOR
HD
VD
NSLEEP
TO MONITOR
HD
VD
NSLEEP

※ NO WEAR


ZOOM UNIT
POWER LAMP
TO SYSCON
CN109
TO REG
CN109
ZOOM_SW 1
GND 2
GND 3
FOCUS_SW 4
PHOTO_SW 5
MENU_P_A 6
MENU_P_B 7
MENU_SET 8
DIAL_PB 9
DIAL_OFF 10
DIAL_AUTO 11
DIAL_MANU 12
POW_LED 13
TRIG_SW 14
REG_3V 15
FOCUS
SNAP SHOT
+
-
MENU/BRIGHT
PLAY
OFF
POWER SWITCH
A
M
START/STOP
(ZOOM SW(T/W)/SPEAKER VOL.(+/−))

4.24 MAIN CIRCUIT BOARD


FOIL SIDE(B)
01 MAIN PWB
YB10330-01-01
IC6101
IC1601
IC4302
IC4201
IC1401
IC4301
IC1403
IC1003
IC1006
IC3002
IC3101
IC1007
IC1002
IC3001
IC1001
IC3201
IC1302
IC1301
CN112
CN105
CN111
CN103
X1002
X3001
X1001
TG3
TG4
ZP-GND
D
C
B
A
1
2
3
4
5

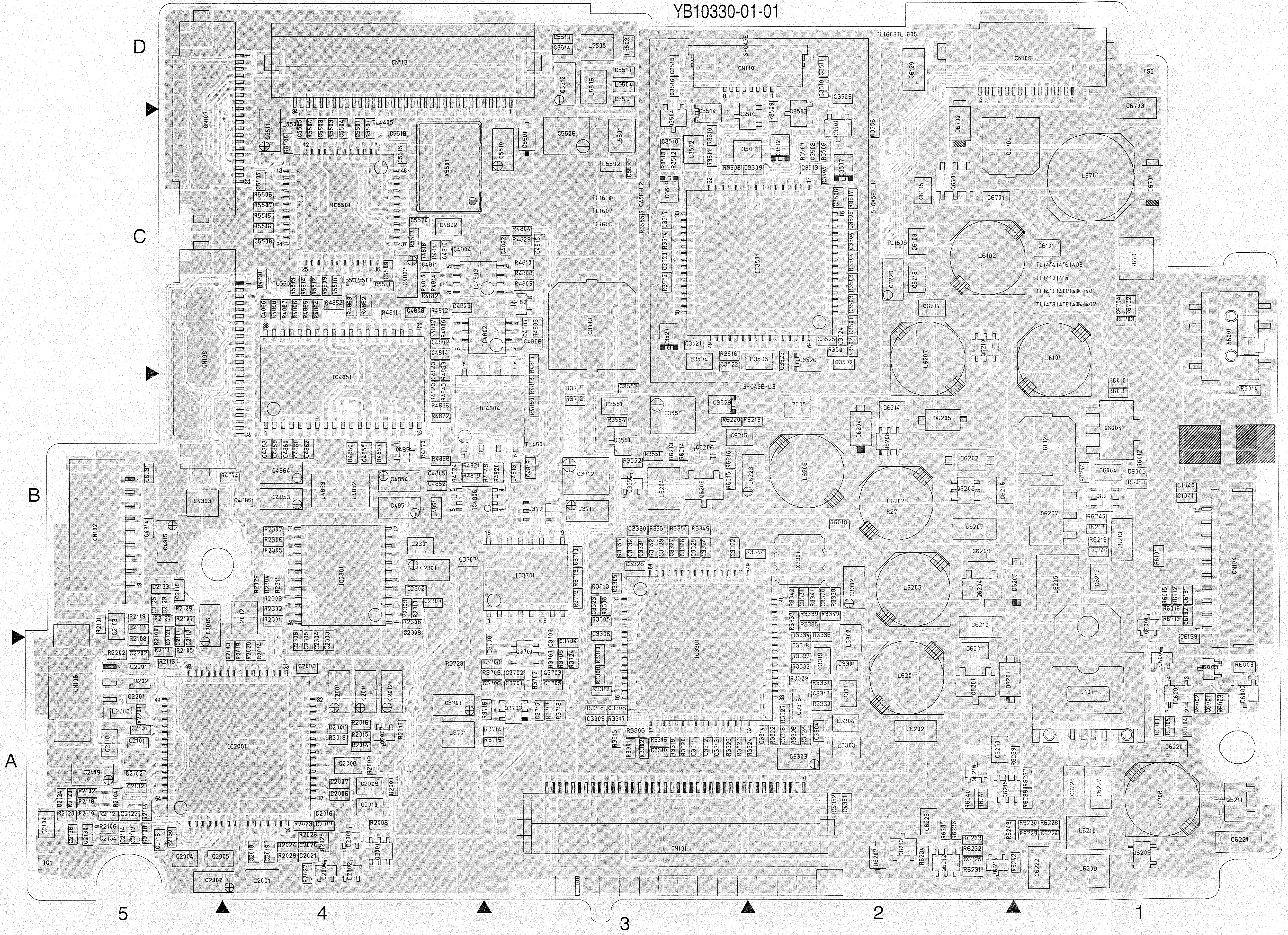
COMPONENT PARTS LOCATION GUIDE <MAIN >

REF.NO.	LOCATION		
CAPACITOR			
C1001	B	C	2B
C1002	B	C	4A
C1003	B	C	3A
C1004	B	C	4A
C1005	B	C	5B
C1006	B	C	5A
C1007	B	C	3C
C1008	B	C	4A
C1009	B	C	4A
C1010	B	C	4A
C1011	B	C	4B
C1012	B	C	4A
C1013	B	C	4A
C1014	B	C	4A
C1015	B	C	4A
C1016	B	C	4A
C1017	B	C	4A
C1018	B	C	4A
C1019	B	C	4A
C1020	B	C	3B
C1021	B	C	4B
C1022	B	C	3C
C1023	B	C	2B
C1024	B	C	4A
C1025	B	C	4A
C1026	B	C	4A
C1027	B	C	4A
C1028	B	C	4A
C1029	B	C	4A
C1030	B	C	4A
C1031	B	C	3A
C1032	B	C	4B
C1034	B	C	3A
C1035	B	C	3A
C1036	B	C	4A
C1037	B	C	4A
C1038	B	C	4B
C1039	B	C	4B
C1040	A	C	1B
C1041	A	C	1B
C1042	B	C	3B
C1301	B	C	4A
C1302	B	C	5A
C1303	B	C	5A
C1304	B	C	5A
C1305	B	C	5A
C1306	B	C	5A
C1307	B	C	5A
C1401	B	C	2C
C1402	B	C	2C
C1405	B	C	2C
C1406	B	C	1B
C1408	B	C	1C
C1409	B	C	1C
C1410	B	C	1B
C1411	B	C	2C
C1412	B	C	2C
C1413	B	C	1C
C1414	B	C	1C
C1415	B	C	1C
C1416	B	C	1C
C1417	B	C	2C
C1418	B	C	2C
C1419	B	C	2C
C1420	B	C	2C
C1601	B	C	3D
C1602	B	C	3C
C1603	B	C	3C
C1605	B	C	3C
C1606	B	C	3C
C1607	B	C	2C
C1610	B	C	3C
C1611	B	C	3C
C1612	B	C	3C
C1613	B	C	3C
C1614	B	C	3C
C1615	B	C	3C
C1616	B	C	3C
C1617	B	C	3C
C1618	B	C	3D
C1619	B	C	3D
C1620	B	C	3D
C1621	B	C	3D
C1622	B	C	3D
C1623	B	C	3D
C1624	B	C	2C
C1625	B	C	2C
C1626	B	C	2C
C1627	B	C	3C
C1628	B	C	2C
C1632	B	C	3D
C1633	B	C	3C
C1635	B	C	2C
C1638	B	C	3C
C1639	B	C	3C
C1640	B	C	3C
C1641	B	C	3C
C1642	B	C	3D
C2001	A	C	4A
C2002	A	C	5A
C2003	A	C	4A
C2004	A	C	5A
C2005	A	C	5A
C2006	A	C	4A
C2007	A	C	4A
C2008	A	C	4A
C2009	A	C	4A
C2010	A	C	4A
C2011	A	C	4A
C2012	A	C	4A
C2013	A	C	4A
C2014	A	C	4A
C2015	A	C	5B
C2016	A	C	4A
C2017	A	C	4A
C2018	A	C	4A
C2019	A	C	4A
C2020	A	C	4A
C2021	A	C	4A
C2101	A	C	5A
C2102	A	C	5A
C2103	A	C	5B
C2104	A	C	5A
C2109	A	C	5A
C2110	A	C	5A
C2111	A	C	5B
C2112	A	C	5A
C2113	A	C	5B
C2114	A	C	5A
C2115	A	C	5B
C2116	A	C	5A
C2121	A	C	5B
C2122	A	C	5A
C2123	A	C	5B
C2124	A	C	5A
C2125	A	C	5B
C2126	A	C	5A
C2130	A	C	5A
C2131	A	C	5A
C2132	A	C	5A
C2133	A	C	5B
C2134	A	C	5A
C2201	A	C	5A
C2202	A	C	5A
C2301	A	C	4B
C2302	A	C	4B
C2303	A	C	4A
C2304	A	C	4A
C2305	A	C	4A
C2306	A	C	4A
C2307	A	C	4B
C2308	A	C	4B
C3003	B	C	3A
C3004	B	C	2A
C3006	B	C	3A
C3007	B	C	3B
C3009	B	C	3A
C3010	B	C	3A
C3011	B	C	3A
C3012	B	C	3A
C3013	B	C	3A
C3022	B	C	2B
C3023	B	C	2B
C3027	B	C	2A
C3028	B	C	2A
C3035	B	C	2A
C3037	B	C	2A
C3038	B	C	2A
C3040	B	C	3A
C3041	B	C	3A
C3042	B	C	3A
C3043	B	C	3A
C3048	B	C	2B
C3049	B	C	2A
C3050	B	C	3A
C3101	B	C	1A
C3102	B	C	1A
C3103	B	C	1B
C3104	B	C	1B
C3105	B	C	1B
C3106	B	C	1B
C3107	B	C	1B
C3108	B	C	1B
C3109	B	C	1A
C3110	B	C	1B
C3111	B	C	1B
C3201	B	C	1A
C3202	B	C	1A
C3203	B	C	2A
C3204	B	C	1A
C3205	B	C	1A
C3206	B	C	1A
C3207	B	C	1A
C3208	B	C	2A
C3209	B	C	1A
C3210	B	C	1A
C3211	B	C	1A
C3212	B	C	2A
C3213	B	C	1A
C3214	B	C	1A
C3215	B	C	1A
C3216	B	C	2A
C3217	B	C	1A
C3221	B	C	2A
C3222	B	C	2A
C3301	A	C	2A
C3302	A	C	2B
C3303	A	C	2A
C3304	A	C	2A
C3305	A	C	3B
C3306	A	C	3B
C3308	A	C	3A
C3309	A	C	3A
C3310	A	C	3A
C3311	A	C	3A
C3312	A	C	3A
C3313	A	C	3A
C3314	A	C	2A
C3315	A	C	2A
C3316	A	C	2A
C3317	A	C	2A
C3318	A	C	2A
C3319	A	C	2A
C3320	A	C	2B
C3321	A	C	2B
C3322	A	C	3B
C3323	A	C	3B
C3324	A	C	3B
C3325	A	C	3B
C3326	A	C	3B
C3327	A	C	3B
C3328	A	C	3B
C3329	A	C	3B
C3330	A	C	3B
C3331	A	C	3B
C3332	A	C	3B
C3501	A	C	2C
C3502	A	C	2C
C3503	A	C	2C
C3504	A	C	2C
C3505	A	C	2C
C3506	A	C	2C
C3507	A	C	2C
C3508	A	C	2C
C3509	A	C	2C
C3510	A	C	2D
C3511	A	C	2D
C3512	A	C	2C
C3513	A	C	2C
C3514	A	C	3C
C3515	A	C	3D
C3516	A	C	3D
C3517	A	C	3C
C3518	A	C	3C
C3519	A	C	3C
C3520	A	C	3C
C3521	A	C	3C
C3522	A	C	3C
C3523	A	C	2C
C3524	A	C	2C
C3525	A	C	2C
C3526	A	C	2C
C3527	A	C	3C
C3528	A	C	3B
C3529	A	C	2D
C3551	A	C	3B
C3552	A	C	3B
C3701	A	C	4A
C3702	A	C	3A
C3703	A	C	3A
C3704	A	C	3A
C3705	A	C	3A
C3706	A	C	3A
C3707	A	C	4B
C3708	A	C	3A
C3709	A	C	3A
C3710	A	C	3B
C3711	A	C	3B
C3712	A	C	3B
C3713	A	C	3C
C3715	A	C	3A
C4201	B	C	4D
C4202	B	C	4C
C4203	B	C	4C
C4204	B	C	5C
C4205	B	C	5C
C4206	B	C	5D
C4207	B	C	5D
C4208	B	C	5D
C4209	B	C	5D
C4210	B	C	4D
C4211	B	C	4C
C4212	B	C	4D
C4213	B	C	4D
C4214	B	C	4C
C4215	B	C	4C
C4216	B	C	4C
C4301	B	C	4C
C4303	B	C	4C
C4304	B	C	5B
C4305	B	C	4B
C4306	B	C	4C
C4307	B	C	4B
C4308	B	C	4B
C4309	B	C	3C
C4310	B	C	3B
C4311	B	C	3C
C4312	B	C	5B
C4313	B	C	4B
C4314	A	C	5B
C4315	A	C	5B
C4316	B	C	5C
C4317	B	C	5B
C4318	B	C	5B
C4319	B	C	5B
C4320	B	C	5B
C4321	B	C	5B
C4322	B	C	4B
C4323	B	C	4C
C4324	B	C	3B
C4325	B	C	4C
C4326	B	C	4B
C4327	B	C	4B
C4328	B	C	4B
C4329	B	C	4C
C4330	B	C	4C
C4331	B	C	3C
C4332	B	C	3C
C4333	B	C	3C
C4334	B	C	4C
C4335	B	C	4B
C4336	B	C	4C
C4337	B	C	4B
C4338	B	C	4B
C4339	B	C	5C
C4340	B	C	4C
C4341	B	C	4C
C4342	B	C	4C
C4343	B	C	4B
C4344	B	C	5C
C4345	B	C	4B
C4346	B	C	4B
C4347	B	C	4B
C4348	B	C	4B
C4349	B	C	5C
C4350	B	C	5B
C4351	A	C	2A
C4352	A	C	2A
C4803	A	C	4C
C4804	A	C	4C
C4805	A	C	4B
C4806	A	C	3C
C4807	A	C	3C
C4808	A	C	4C
C4809	A	C	4C
C4810	A	C	4C
C4811	A	C	4C
C4812	A	C	4C
C4813	A	C	3B
C4814	A	C	4C
C4815	A	C	3C
C4819	A	C	3B
C4820	A	C	4C
C4822	A	C	3C
C4823	A	C	4C
C4851	A	C	4B
C4852	A	C	4B
C4853	A	C	4B
C4854	A	C	4B
C4855	A	C	4B
C4858	A	C	4B
C4859	A	C	4B
C4860	A	C	4B
C4861	A	C	4B
C4862	A	C	4B
C4864	A	C	4B
C4865	A	C	4B
C4866	A	C	4C
C5501	A	C	4C
C5503	A	C	4C
C5504	A	C	4C
C5505	A	C	4C
C5506	A	C	3C
C5507	A	C	4C
C5508	A	C	4C
C5509	A	C	4C
C5510	A	C	3C
C5511	A	C	4C
C5512	A	C	3D
C5513	A	C	3D
C5514	A	C	3D
C5515	A	C	4C
C5516	A	C	3C
C5517	A	C	3D
C5518	A	C	4C
C5519	A	C	3D
C5520	A	C	4C
C6001	A	C	1A
C6004	A	C	1B
C6005	A	C	1B
C6101	A	C	1C
C6102	A	C	1B
C6103	A	C	2C
C6105	A	C	2C
C6106	B	C	1C
C6107	B	C	1C
C6108	B	C	1C
C6109	B	C	1C
C6110	B	C	2C
C6111	B	C	2C
C6112	B	C	2C
C6113	B	C	2C
C6114	B	C	2D
C6115	B	C	2D
C6116	B	C	2D
C6117	B	C	2D
C6118	B	C	2D
C6119	B	C	2D
C6120	A	C	2D
C6121	B	C	2D
C6122	B	C	2D
C6123	B	C	1D
C6124	B	C	1D
C6125	B	C	1D
C6126	B	C	1D
C6127	B	C	1D
C6128	B	C	1D
C6129	B	C	1C
C6130	B	C	1C
C6131	A	C	1B
C6132	A	C	1B
C6133	A	C	1A
C6134	B	C	1C
C6201	A	C	2A
C6202	A	C	2A
C6203	B	C	2D
C6204	B	C	2D
C6205	B	C	2D
C6206	A	C	2B
C6207	A	C	2B
C6208	B	C	2D
C6209	A	C	2B
C6210	A	C	2B
C6211	B	C	2D
C6212	A	C	1B
C6213	A	C	1B
C6214	A	C	2B
C6215	A	C	3B
C6216	B	C	2C
C6217	A	C	2C
C6218	A	C	2C
C6219	B	C	2D
C6220	A	C	1A
C6221	A	C	1A
C6222	A	C	1A
C6223	A	C	2B
C6224	A	C	1A
C6225	A	C	2A
C6226	A	C	2A
C6227	A	C	1A
C6228	A	C	1A
C6229	A	C	2C
C6230	A	C	2A
C6231	A	C	5B
C6701	A	C	2C
C6702	A	C	1C
C6703	A	C	1D
C6704	A	C	1C
C6705	B	C	2C
CONNECTOR			
CN101	A	C	3A
CN102	A	C	5B
CN103	B	C	5B
CN104	A	C	1B
CN105	B	C	1B
CN106	A	C	5A
CN107	A	C	4D
CN108	A	C	4C
CN109	A	C	1D
CN110	A	C	2D
CN111	B	C	1B
CN112	B	C	4D
CN113	A	C	3D
DIODE			
D1001	B	C	3A
D1301	B	C	5A
D1302	B	C	5B
D1602	B	C	3D
D1603	B	C	3C
D1604	B	C	2D
D2001	A	C	4A
D2002	A	C	4A
D3701	A	C	3B
D5501	A	C	3C
D6002	A	C	1A
D6201	A	C	2A
D6202	A	C	2B
D6203	A	C	1B
D6204	A	C	2B
D6205	A	C	2B
D6206	A	C	1A
D6207	A	C	2A
D6701	A	C	1C
D6702	A	C	2C
IC			
IC1001	B	C	4A
IC1002	B	C	5A
IC1003	B	C	3B
IC1004	B	C	4B
IC1005	B	C	4B
IC1006	B	C	3B
IC1007	B	C	3B
IC1009	B	C	4A
IC1301	B	C	5A
IC1302	B	C	5A
IC1303	B	C	5A
IC1304	B	C	5A
IC1401	B	C	2C
IC1402	B	C	2C
IC1403	B	C	1B
IC1404	B	C	2C
IC1601	B	C	3C
IC2001	A	C	4A
IC2301	A	C	4B
IC3001	B	C	2A
IC3002	B	C	2B
IC3005	B	C	2A
IC3007	B	C	3A
IC3101	B	C	1B
IC3201	B	C	1A
IC3202	B	C	2A
IC3301	A	C	3A
IC3501	A	C	2C
IC3701	A	C	3B
IC4201	B	C	4C
IC4202	B	C	4C
IC4301	B	C	4C
IC4302	B	C	4C
IC4304	B	C	3C
IC4802	A	C	3C
IC4803	A	C	4C
IC4804	A	C	3B
IC4806	A	C	4B
IC4851	A	C	4B
IC5501	A	C	4C
IC6001	A	C	1A
IC6101	B	C	1C
COIL			
L1001	B	C	2C
L1002	B	C	3A
L1401	B	C	2C
L1402	B	C	2C
L2001	A	C	4A
L2002	A	C	4B
L2201	A	C	5A
L2202	A	C	5A
L2203	A	C	5A
L2301	A	C	4B
L3001	B	C	2A
L3002	B	C	2A
L3005	B	C	3B
L3101	B	C	1B
L3102	B	C	1B
L3103	B	C	1A
L3104	B	C	1A
L3201	B	C	1A
L3202	B	C	1A
L3203	B	C	2A
L3301	A	C	2A
L3302	A	C	2A
L3303	A	C	2A
L3304	A	C	2A
L3501	A	C	2C
L3502	A	C	3C
L3503	A	C	2C
L3504	A	C	3C
L3505	A	C	2B
L3551	A	C	3B
L3701	A	C	4A
L4201	B	C	4C
L4301	B	C	4C
L4302	B	C	4C
L4303	A	C	5B
L4304	B	C	4B
L4305	B	C	3C
L4306	B	C	4B
L4307	B	C	3B
L4802	A	C	4C
L4851	A	C	4B
L4852	A	C	4B
L4853	A	C	4B
L5501	A	C	3C
L5502	A	C	3C
L5503	A	C	3D
L5504	A	C	3D
L5505	A	C	3D
L5506	A	C	3D
L6101	A	C	1C
L6102	A	C	2C
L6201	A	C	2A
L6202	A	C	2B
L6203	A	C	2B
L6204	A	C	3B
L6205	A	C	1B
L6206	A	C	2B
L6207	A	C	2C
L6208	A	C	1A
L6209	A	C	1A
L6210	A	C	1A
L6701	A	C	1C
TRANSISTOR			
Q1001	B	C	3A
Q1002	B	C	3A
Q1003	B	C	5A
Q1004	B	C	4B
Q1005	B	C	4B
Q1006	B	C	4A
Q1007	B	C	4A
Q1301	B	C	5B
Q1401	B	C	1C
Q1402	B	C	2C
Q1403	B	C	2C
Q1404	B	C	2B
Q1601	B	C	3C
Q2001	A	C	4A
Q2002	A	C	4A
Q2004	A	C	4A
Q3501	A	C	2C
Q3502	A	C	2C
Q3503	A	C	2C
Q3504	A	C	3C
Q3551	A	C	3B
Q3552	A	C	3B
Q3701	A	C	3A
Q3702	A	C	3A
Q4301	B	C	4B
Q4302	B	C	4B
Q4303	B	C	4B
Q4801	A	C	3C
Q4851	A	C	4B
Q6001	A	C	1B
Q6002	A	C	1A
Q6003	A	C	1A
Q6004	A	C	1B
Q6101	B	C	1C
Q6102	B	C	1C
Q6201	A	C	2A
Q6202	B	C	2D
Q6203	A	C	2B
Q6204	A	C	2B
Q6205	A	C	3B
Q6206	A	C	3B
Q6207	A	C	1B

REF.NO.	LOCATION		
Q6208	A	C	2B
Q6210	A	C	2C
Q6211	A	C	1A
Q6212	A	C	2A
Q6213	A	C	2A
Q6214	A	C	2A
Q6215	A	C	2A
Q6216	A	C	2A
Q6217	A	C	1B
Q6701	A	C	2C
RESISTOR			
R1001	B	C	4A
R1002	B	C	4A
R1003	B	C	4A
R1004	B	C	5A
R1005	B	C	4A
R1006	B	C	4A
R1007	B	C	4A
R1008	B	C	2B
R1009	B	C	4B
R1010	B	C	4A
R1011	B	C	4B
R1012	B	C	4B
R1013	B	C	4B
R1014	B	C	4B
R1015	B	C	4B
R1016	B	C	4B
R1017	B	C	3B
R1018	B	C	3B
R1019	B	C	4A
R1020	B	C	3B
R1021	B	C	3C
R1022	B	C	3B
R1023	B	C	4B
R1024	B	C	4B
R1025	B	C	3B
R1026	B	C	3B
R1027	B	C	3B
R1028	B	C	4B
R1029	B	C	4A
R1030	B	C	4A
R1031	B	C	4B
R1032	B	C	4B
R1033	B	C	3B
R1034	B	C	3B
R1037	B	C	4A
R1039	B	C	4A
R1040	B	C	4A
R1044	B	C	5A
R1045	B	C	5A
R1046	B	C	5A
R1047	B	C	4A
R1048	B	C	5A
R1049	B	C	5A
R1050	B	C	5A
R1051	B	C	3A
R1052	B	C	3A
R1053	B	C	3A
R1054	B	C	3A
R1055	B	C	3A
R1056	B	C	3A
R1057	B	C	3A
R1058	B	C	3A
R1061	B	C	3A
R1062	B	C	3B
R1080	B	C	3B
R1081	B	C	3B
R1302	B	C	5A
R1305	B	C	5B
R1306	B	C	5A
R1307	B	C	5A
R1308	B	C	5A
R1401	B	C	1B
R1402	B	C	1C
R1403	B	C	1C
R1407	B	C	1B
R1408	B	C	1B
R1409	B	C	1B
R1410	B	C	1C
R1411	B	C	1B
R1412	B	C	1C
R1413	B	C	1C
R1414	B	C	2C
R1415	B	C	2C
R1416	B	C	2C
R1418	B	C	2C
R1419	B	C	2C
R1420	B	C	2B
R1422	B	C	1C
R1423	B	C	1C
R1424	B	C	1C
R1425	B	C	1C
R1426	B	C	1C
R1427	B	C	1C
R1428	B	C	1C
R1429	B	C	1C
R1430	B	C	1C
R1432	B	C	2C
R1434	B	C	2C
R1436	B	C	2C
R1437	B	C	2B
R1439	B	C	2C
R1440	B	C	2C
R1441	B	C	2C
R1442	B	C	2C
R1443	B	C	2C
R1444	B	C	2C
R1445	B	C	2C
R1446	B	C	1C
R1447	B	C	1C
R1601	B	C	3C
R1602	B	C	3C
R1603	B	C	3C
R1604	B	C	3C
R1605	B	C	3C
R1606	B	C	2D
R1607	B	C	2C
R1608	B	C	2D
R1609	B	C	3C
R1610	B	C	3D
R1611	B	C	3D
R1612	B	C	3D
R1613	B	C	3D
R1614	B	C	3D
R1615	B	C	3D
R1616	B	C	2C
R1617	B	C	2C
R1618	B	C	2C
R1619	B	C	2C
R1620	B	C	2C
R1621	B	C	2C
R1622	B	C	2D
R1624	B	C	3C
R1625	B	C	2C
R1626	B	C	2C
R1628	B	C	3C
R1629	B	C	2C
R1635	B	C	3C
R1636	B	C	3C
R1637	B	C	3C
R1638	B	C	2C
R1639	B	C	2C
R1640	B	C	2C
R1641	B	C	2C
R1643	B	C	2C
R1646	B	C	2C
R2006	A	C	4A
R2007	A	C	4A
R2008	A	C	4A
R2009	A	C	4A
R2014	A	C	4A
R2015	A	C	4A
R2016	A	C	4A
R2017	A	C	4A
R2018	A	C	4A
R2019	A	C	4A
R2020	A	C	4A
R2023	A	C	4A
R2024	A	C	4A
R2025	A	C	4A
R2026	A	C	4A
R2027	A	C	4A
R2028	A	C	4A
R2029	A	C	4B
R2101	A	C	5B
R2102	A	C	5A
R2103	A	C	5A
R2104	A	C	5A
R2105	A	C	5A
R2106	A	C	5A
R2107	A	C	5B
R2108	A	C	5A
R2109	A	C	5B
R2110	A	C	5A
R2111	A	C	5A
R2112	A	C	5A
R2113	A	C	5A
R2114	A	C	5A
R2117	A	C	5B
R2118	A	C	5A
R2119	A	C	5B
R2120	A	C	5A
R2127	A	C	5B
R2128	A	C	5A
R2129	A	C	5B
R2130	A	C	5A
R2201	A	C	5A
R2202	A	C	5A
R2301	A	C	4B
R2302	A	C	4B
R2303	A	C	4B
R2304	A	C	4B
R2305	A	C	4B
R2306	A	C	4B
R2307	A	C	4B
R2308	A	C	4B
R2309	A	C	4B
R2310	A	C	4B
R2311	A	C	4B
R3002	B	C	3A
R3008	B	C	3A
R3012	B	C	3A
R3013	B	C	3A
R3016	B	C	3A
R3017	B	C	3A
R3018	B	C	3A
R3019	B	C	3A
R3030	B	C	3A
R3031	B	C	3A
R3032	B	C	2B
R3036	B	C	2A
R3037	B	C	2A
R3047	B	C	2A
R3048	B	C	2A
R3049	B	C	2A
R3052	B	C	3A
R3054	B	C	3A
R3055	B	C	3A
R3056	B	C	3A
R3057	B	C	3A
R3058	B	C	2A
R3059	B	C	2A
R3060	B	C	3A
R3061	B	C	3A
R3062	B	C	3A
R3063	B	C	3A
R3064	B	C	3A
R3101	B	C	1B
R3102	B	C	1B
R3103	B	C	1B
R3105	B	C	1B
R3106	B	C	1B
R3113	B	C	1B
R3115	B	C	1B
R3117	B	C	1A
R3118	B	C	1A
R3119	B	C	1A
R3120	B	C	1A
R3121	B	C	1A
R3128	B	C	1A
R3129	B	C	1A
R3201	B	C	1A
R3202	B	C	1A
R3203	B	C	2A
R3204	B	C	2A
R3208	B	C	1A
R3209	B	C	1A
R3211	B	C	2A
R3301	A	C	3A
R3302	A	C	3A
R3303	A	C	3A
R3305	A	C	3B
R3306	A	C	3B
R3308	A	C	3A
R3310	A	C	3A
R3312	A	C	3A
R3313	A	C	3B
R3315	A	C	3A
R3316	A	C	3A
R3317	A	C	3A
R3318	A	C	3A
R3319	A	C	3A
R3320	A	C	3A
R3322	A	C	2A
R3323	A	C	3A
R3324	A	C	2A
R3325	A	C	3A
R3326	A	C	2A
R3327	A	C	2A
R3328	A	C	2A
R3329	A	C	2A
R3330	A	C	2A
R3331	A	C	2A
R3332	A	C	2A
R3333	A	C	2A
R3334	A	C	2A
R3335	A	C	2B
R3336	A	C	2A
R3337	A	C	2B
R3338	A	C	2B
R3339	A	C	2B
R3340	A	C	2B
R3341	A	C	2B
R3342	A	C	2B
R3344	A	C	2B
R3349	A	C	3B
R3350	A	C	3B
R3351	A	C	3B
R3352	A	C	3B
R3353	A	C	3B
R3501	A	C	2C
R3502	A	C	2C
R3503	A	C	2C
R3504	A	C	2C
R3505	A	C	2C
R3506	A	C	2C
R3507	A	C	2C
R3508	A	C	3C
R3509	A	C	2C
R3510	A	C	3C
R3511	A	C	3C
R3512	A	C	3C
R3513	A	C	3C
R3514	A	C	3C
R3515	A	C	3C
R3516	A	C	3C
R3517	A	C	2C
R3551	A	C	3B
R3552	A	C	3B
R3554	A	C	3B
R3555	A	C	3C
R3556	A	C	2C
R3701	A	C	3A
R3702	A	C	3A
R3703	A	C	3A
R3706	A	C	3A
R3707	A	C	3A
R3708	A	C	3A
R3711	A	C	3B
R3712	A	C	3B
R3713	A	C	3B
R3714	A	C	3A
R3715	A	C	3A
R3716	A	C	3A
R3717	A	C	3A
R3718	A	C	3A
R3719	A	C	3B
R3723	A	C	4A
R3724	A	C	3A
R4201	B	C	5C
R4202	B	C	5C
R4203	B	C	5C
R4204	B	C	5D
R4205	B	C	4D
R4206	B	C	4C
R4207	B	C	4C
R4208	B	C	4C
R4301	B	C	4B
R4303	B	C	5C
R4304	B	C	5C
R4305	B	C	5C
R4306	B	C	5C
R4307	B	C	5B
R4308	B	C	5B
R4309	B	C	5C
R4310	B	C	5C
R4311	B	C	5B
R4312	B	C	5B
R4313	B	C	5B
R4314	B	C	5B
R4315	B	C	5B
R4316	B	C	4B
R4317	B	C	4B
R4318	B	C	4B
R4319	B	C	4B
R4320	B	C	4B
R4321	B	C	4B
R4322	B	C	4B
R4323	B	C	4B
R4324	B	C	4B
R4325	B	C	4B
R4326	B	C	4B
R4327	B	C	4B
R4328	B	C	4B
R4329	B	C	4B
R4330	B	C	4B
R4331	B	C	4B
R4332	B	C	4B
R4333	B	C	4B
R4334	B	C	4B
R4335	B	C	4C
R4336	B	C	4C
R4337	B	C	4B
R4338	B	C	4C
R4339	B	C	4B
R4340	B	C	4B
R4341	B	C	3B
R4342	B	C	5B
R4343	B	C	5B
R4344	B	C	5B
R4345	B	C	4B
R4347	B	C	5C
R4348	B	C	5B
R4349	B	C	5B
R4350	B	C	5C
R4351	B	C	5B
R4804	A	C	3C
R4805	A	C	3C
R4806	A	C	4C
R4807	A	C	4C
R4808	A	C	3C
R4809	A	C	3C
R4810	A	C	3C
R4811	A	C	4C
R4812	A	C	4C
R4813	A	C	4C
R4814	A	C	4C
R4815	A	C	4C
R4816	A	C	4C
R4817	A	C	3C
R4818	A	C	3B
R4819	A	C	4B
R4820	A	C	3B
R4821	A	C	4B
R4822	A	C	4B
R4823	A	C	4B
R4824	A	C	4B
R4829	A	C	3C
R4831	A	C	4C
R4833	A	C	4C
R4836	A	C	4B
R4845	A	C	4B
R4848	A	C	3B
R4850	A	C	3B
R4852	A	C	4C
R4856	A	C	4B
R4857	A	C	4B
R4858	A	C	4B
R4862	A	C	4C
R4863	A	C	4C
R4864	A	C	4C
R4865	A	C	4C
R4866	A	C	4C
R4867	A	C	4C
R4868	A	C	4C
R4870	A	C	4B
R4874	A	C	4B
R5501	A	C	4C
R5503	A	C	4C
R5504	A	C	4C
R5505	A	C	4C
R5506	A	C	4C
R5507	A	C	4C
R5509	A	C	4C
R5510	A	C	4C
R5511	A	C	4C
R5512	A	C	4C
R5513	A	C	4C
R5514	A	C	4C
R5515	A	C	4C
R5516	A	C	4C
R5517	A	C	4C
R6001	A	C	1A
R6002	A	C	1A
R6003	A	C	1A
R6004	A	C	1A
R6005	A	C	1A
R6009	A	C	1A
R6010	A	C	1B
R6011	A	C	1B
R6012	A	C	1B
R6013	A	C	1B
R6014	A	C	1B
R6015	A	C	1B
R6016	A	C	1B
R6018	A	C	2B
R6101	B	C	2C
R6102	B	C	2C
R6103	B	C	2C
R6104	B	C	1C
R6105	B	C	2C
R6106	B	C	2C
R6107	B	C	2C
R6108	B	C	2C
R6109	B	C	2C
R6110	B	C	2C
R6113	B	C	2D
R6114	B	C	2D
R6115	B	C	2D
R6116	B	C	2D
R6117	B	C	1D
R6118	B	C	1C
R6122	B	C	1C
R6123	B	C	1C
R6124	B	C	1C
R6201	B	C	2C
R6202	B	C	2D
R6203	B	C	2C
R6204	B	C	2D
R6205	B	C	2D
R6206	B	C	2D
R6207	B	C	2D
R6208	B	C	2D
R6209	B	C	2D
R6210	B	C	2D
R6211	B	C	2D
R6212	B	C	2D
R6213	A	C	3B
R6214	A	C	3B
R6215	A	C	3B
R6216	A	C	3B
R6217	A	C	1B
R6218	A	C	1B
R6219	A	C	2B
R6220	A	C	3B
R6221	B	C	2C
R6223	B	C	2C
R6224	B	C	2D
R6225	B	C	2D
R6226	B	C	2D
R6227	B	C	2D
R6228	A	C	1A
R6229	A	C	1A
R6230	A	C	1A
R6231	A	C	2A
R6232	A	C	2A
R6233	A	C	2A
R6234	A	C	2A
R6235	A	C	2A
R6236	A	C	2A
R6237	A	C	1A
R6238	A	C	1A
R6239	A	C	1A
R6240	A	C	2A
R6241	A	C	2A
R6242	A	C	1A
R6243	A	C	2A
R6244	A	C	1B
R6245	A	C	1B
R6246	A	C	1B
R6701	A	C	1C
R6702	A	C	1C
R6703	A	C	1C
R6712	A	C	1B
R6713	A	C	1B
RA1001	B	C	4A
RA1002	B	C	4A
RA1003	B	C	4A
RA1004	B	C	4A
RA1005	B	C	4A
RA1006	B	C	3A
RA1007	B	C	3A
RA1008	B	C	3A
RA1009	B	C	4A
RA1010	B	C	3A
RA1401	B	C	1C
RA1403	B	C	1C
RA3001	B	C	3A
RA3002	B	C	3A
RA4301	B	C	4D
RA4302	B	C	3D
RA4303	B	C	4D
TESTPOINT			
TP4319	B	C	4C
OTHER			
F6101	A	C	1B
J101	A	D	1A
S6001	A	C	1C
TL1001	B	C	3A
TL1002	B	C	4B
TL1003	B	C	4B
TL1301	B	C	4A
TL1401	A	C	1C
TL1402	A	C	1C
TL1403	A	C	1C
TL1404	A	C	1C
TL1406	A	C	1C
TL1407	A	C	1C
TL1410	A	C	1C
TL1411	A	C	1C
TL1412	A	C	1C
TL1413	A	C	1C
TL1414	A	C	1C
TL1415	A	C	1C
TL1416	A	C	1C
TL1601	B	C	2C
TL1602	B	C	3D
TL1603	B	C	3D
TL1604	B	C	3C
TL1605	A	C	2D
TL1606	A	C	2C
TL1607	A	C	3C
TL1608	A	C	2D
TL1609	A	C	3C
TL1610	A	C	3C
TL1611	B	C	3D
TL1612	B	C	3C
TL1613	B	C	3C
TL1614	B	C	3D
TL1615	B	C	3C
TL1616	B	C	2C
TL1617	B	C	2C
TL1618	B	C	2C
TL1619	B	C	2C
TL3004	B	C	2A
TL3005	B	C	3B
TL3006	B	C	3A
TL3007	B	C	3A
TL3009	B	C	2A
TL3010	B	C	3A
TL3011	B	C	2A
TL3012	B	C	2A
TL3210	B	C	1A
TL3211	B	C	1A
TL3212	B	C	1A
TL3213	B	C	1A
TL3214	B	C	1A
TL3215	B	C	1A
TL3216	B	C	1A
TL3217	B	C	1A
TL3501	B	C	1B
TL4201	B	C	5C
TL4202	B	C	5C
TL4203	B	C	5D
TL4301	B	C	5C
TL4302	B	C	4B
TL4303	B	C	4B
TL4304	B	C	5C
TL4305	B	C	4B
TL4306	B	C	4B
TL4307	B	C	4B
TL4308	B	C	4B
TL4309	B	C	4B
TL4310	B	C	4B
TL4311	B	C	4B
TL4312	B	C	4B
TL4313	B	C	4B
TL4314	B	C	3C
TL4315	B	C	3C
TL4316	B	C	3C
TL4317	B	C	3C
TL4318	B	C	4B
TL4405	A	C	4C
TL4801	A	C	3B
TL5501	A	C	4C
TL5502	A	C	4C
TL5503	A	C	4C
TL5504	A	C	4C
X1001	B	C	4A
X1002	B	C	5A
X3001	B	C	3A
X3301	A	C	2B
X5501	A	C	4C

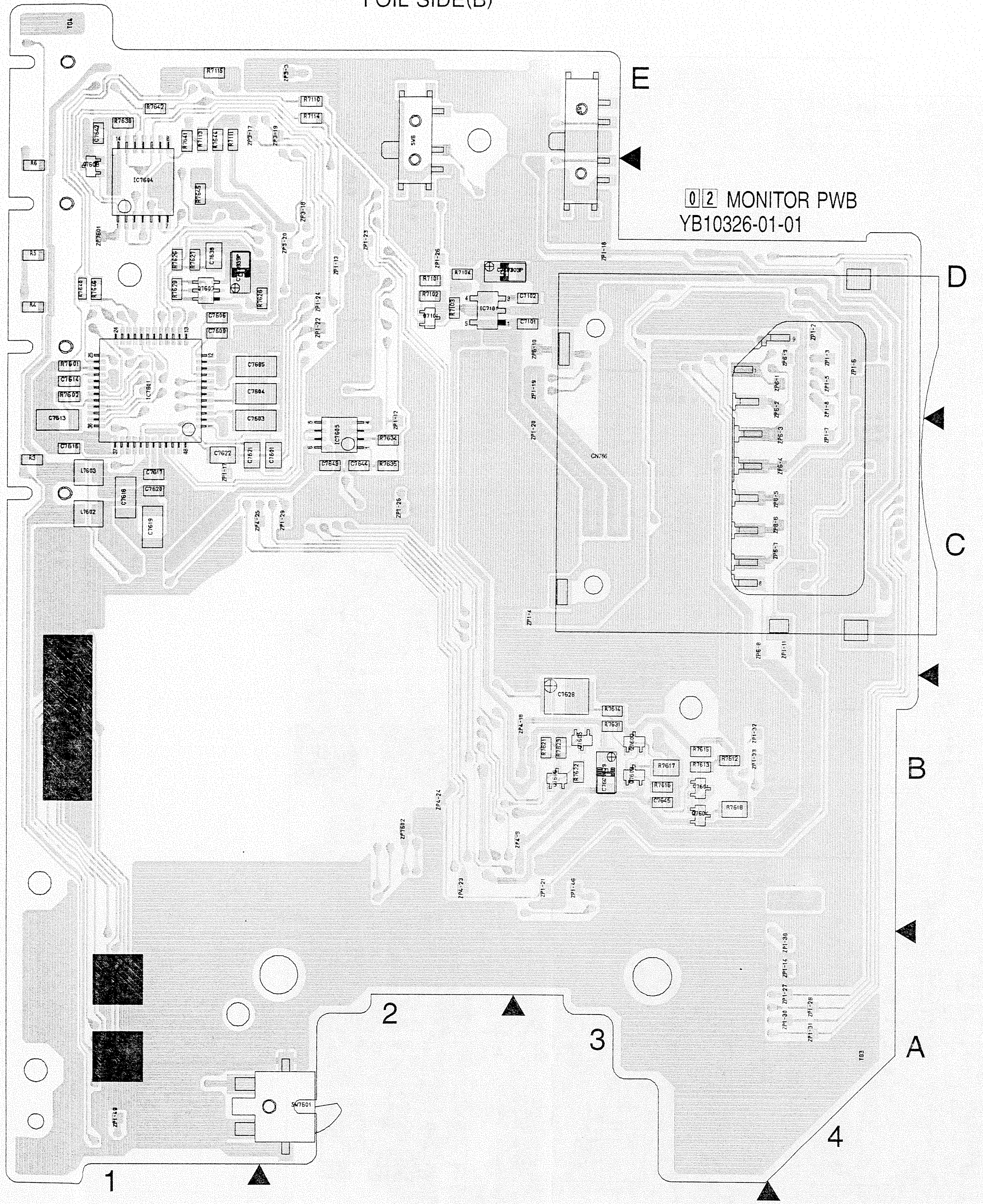
COMPONENT SIDE(A)

01 MAIN PWB
YB10330-01-01

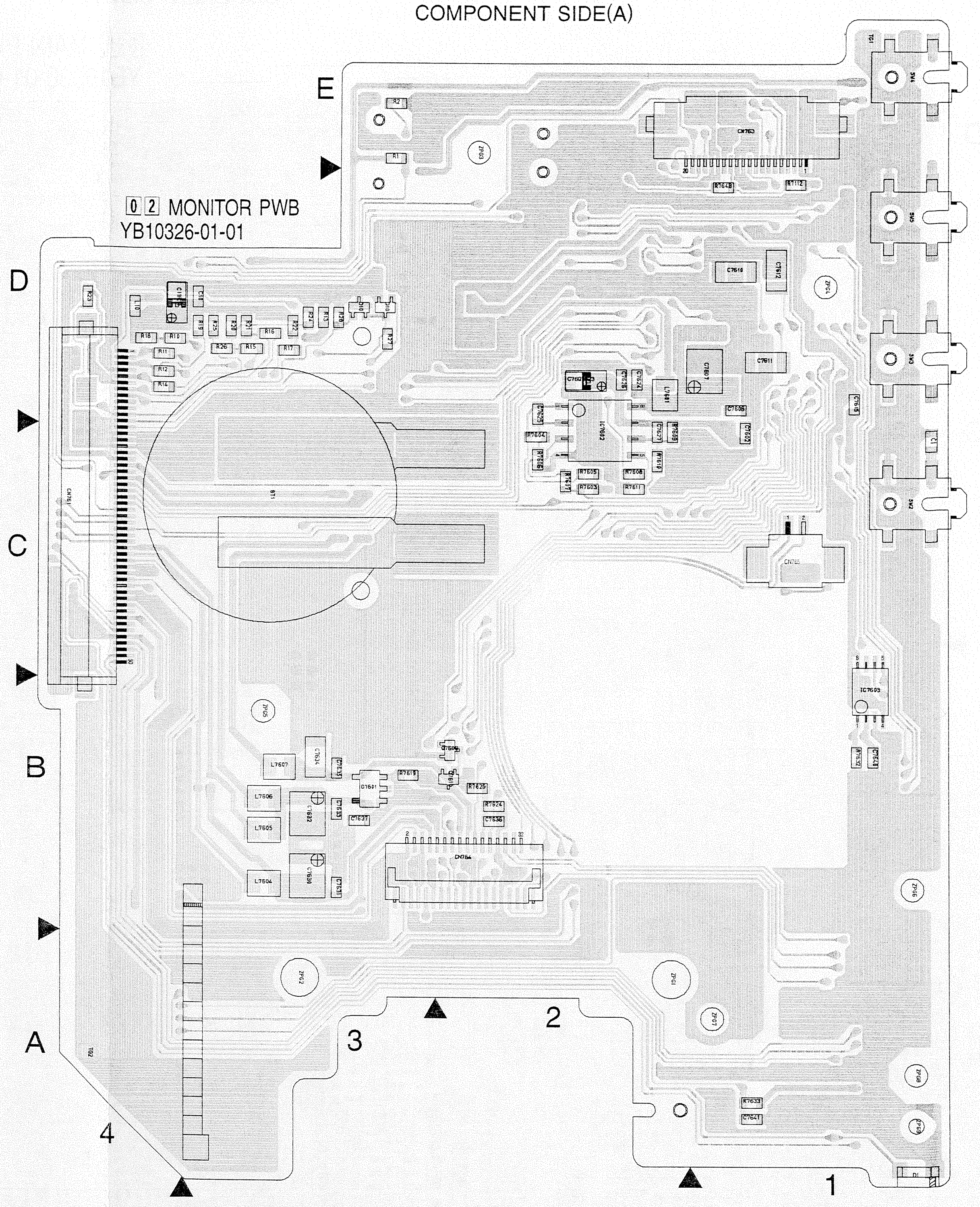

D
C
B
A
5
4
3
2
1
CN113
CN107
CN108
CN102
CN106
CN110
CN109
CN104
CN101
IC5501
IC4851
IC4802
IC4803
IC4804
IC4806
IC2301
IC2001
IC3701
IC3501
IC3301
X5501
X3301
J101
S6001
L6701
L6102
L6207
L6101
L6206
L6202
L6203
L6201
L6208
TG1
TG2

4.25 MONITOR CIRCUIT BOARD

FOIL SIDE(B)



COMPONENT SIDE(A)



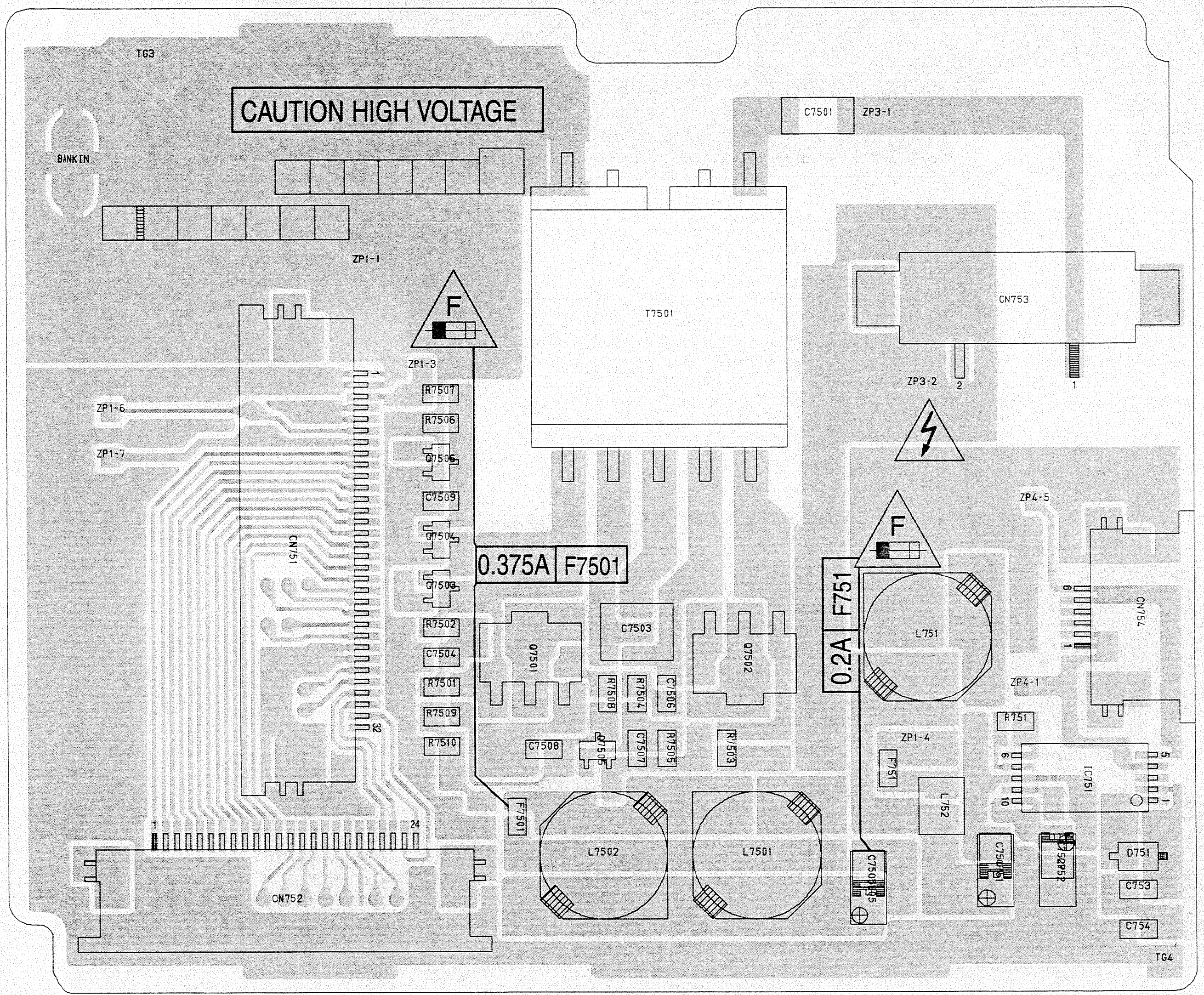
COMPONENT PARTS LOCATION GUIDE <MONITOR >

REF.NO.	LOCATION		
CAPACITOR			
C1	A	C	1C
C10	A	C	3D
C11	A	C	3D
C7101	B	C	2D
C7102	B	C	2D
C7103	B	C	2D
C7601	B	C	1C
C7602	A	C	1C
C7603	B	C	1C
C7604	B	C	1D
C7605	B	C	1D
C7606	B	C	1D
C7607	A	C	1D
C7608	A	C	1D
C7609	B	C	1D
C7610	A	C	1D
C7611	A	C	1D
C7612	A	C	1D
C7613	B	C	1C
C7614	B	C	1D
C7615	A	C	1D
C7616	B	C	1C
C7617	B	C	1C
C7618	B	C	1C
C7619	B	C	1C
C7620	B	C	1C
C7621	B	C	1C
C7622	B	C	1C
C7623	A	C	2D
C7624	A	C	2D
C7625	A	C	2D
C7626	A	C	2D
C7627	A	C	2C
C7628	B	C	3B
C7629	B	C	3B
C7630	A	C	3B
C7631	A	C	3B
C7632	A	C	3B
C7633	A	C	3B
C7634	A	C	3B
C7635	A	C	3B
C7636	A	C	2B
C7637	A	C	3B
C7638	B	C	1D
C7639	B	C	1D
C7640	A	C	1B
C7641	A	C	1A
C7642	B	C	1E
C7643	B	C	2C
C7644	B	C	2C
C7645	B	C	3B
CONNECTOR			
CN761	A	C	4D
CN763	A	C	1E
CN764	A	C	3B
CN765	A	C	1C
CN766	B	C	4C
DIODE			
D1	A	C	1A
D10	A	C	3D
D7601	A	C	3B
IC			
IC7101	B	C	2D
IC7601	B	C	1D
IC7602	A	C	2C
IC7603	A	C	1B
IC7604	B	C	1D
IC7605	B	C	2C
COIL			
L10	A	C	4D
L7601	A	C	2D
L7602	B	C	1C
L7603	B	C	1C
L7604	A	C	3B
L7605	A	C	3B
L7606	A	C	3B
L7607	A	C	3B
TRANSISTOR			
Q10	A	C	3D
Q7101	B	C	2D
Q7601	B	C	3B
Q7602	B	C	3B
Q7603	B	C	3B
Q7604	B	C	3B
Q7605	B	C	3B
Q7606	B	C	3B
Q7607	B	C	1D
Q7608	B	C	1D
Q7609	A	C	2B
Q7610	A	C	2B
RESISTOR			
R1	A	C	3E
R2	A	C	3E
R3	B	C	1C
R4	B	C	1D
R5	B	C	1D
R6	B	C	1D
R10	A	C	3D
R11	A	C	4D
R12	A	C	4D
R13	A	C	3D
R14	A	C	4D
R15	A	C	3D
R16	A	C	3D
R17	A	C	3D
R18	A	C	4D
R19	A	C	3D
R20	A	C	3D
R21	A	C	3D
R22	A	C	3D
R23	A	C	4D
R24	A	C	3D
R25	A	C	3D
R26	A	C	3D
R27	A	C	3D
R28	A	C	3D
R7101	B	C	2D
R7102	B	C	2D
R7103	B	C	2D
R7104	B	C	2D
R7110	B	C	2E
R7111	B	C	1E
R7112	A	C	1D
R7113	B	C	1E
R7114	B	C	2E
R7115	B	C	1E
R7601	B	C	1D
R7602	B	C	1D
R7603	A	C	2C
R7604	A	C	2C
R7605	A	C	2C
R7606	A	C	2C
R7607	A	C	2C
R7608	A	C	2C
R7609	A	C	2C
R7610	A	C	2C
R7611	A	C	2C
R7612	B	C	3B
R7613	B	C	3B
R7614	B	C	3B
R7615	B	C	3B
R7616	B	C	3B
R7617	B	C	3B
R7618	B	C	3B
R7619	A	C	3B
R7621	B	C	3B
R7622	B	C	3B
R7623	B	C	3B
R7624	A	C	2B
R7625	A	C	2B
R7626	B	C	1D
R7627	B	C	1D
R7628	B	C	1D
R7629	B	C	1D
R7630	B	C	1E
R7631	B	C	3B
R7632	A	C	1B
R7633	A	C	1A
R7634	B	C	2C
R7635	B	C	2C
R7640	B	C	1D
R7641	B	C	1E
R7642	B	C	1E
R7643	A	C	1D
R7644	B	C	1E
R7645	B	C	1D
R7646	B	C	1D
OTHER			
BT1	A	C	3C
C11P	A	C	3D
C7103P	B	C	2D
C7623P	A	C	2D
C7629P	B	C	3B
C7639P	B	C	1D
SW1	B	C	3E
SW2	A	C	1C
SW3	A	C	1D
SW4	A	C	1E
SW5	A	C	1D
SW6	B	C	2E
SW7601	B	C	2A
TM1	A	C	4A
TM03	A	C	4E
TM3	A	C	4E
ZP1-2	B	C	4D
ZP1-3	B	C	4D
ZP1-4	B	C	3C
ZP1-5	B	C	4D
ZP1-6	B	C	4D
ZP1-7	B	C	4C
ZP1-8	B	C	4C
ZP3-3	B	C	2E
ZP4-9	B	C	2B
ZP6-1	B	C	3D
ZP6-2	B	C	3C
ZP6-3	B	C	3C
ZP6-4	B	C	3C
ZP6-5	B	C	3C
ZP6-6	B	C	3C
ZP6-7	B	C	3C
ZP6-8	B	C	3C
ZP6-9	B	C	3D
ZP1-11	B	C	4C
ZP1-12	B	C	2C
ZP1-13	B	C	2D
ZP1-14	B	C	4A
ZP1-17	B	C	1C
ZP1-18	B	C	3D
ZP1-19	B	C	3D
ZP1-20	B	C	3C
ZP1-21	B	C	3B
ZP1-22	B	C	2D
ZP1-23	B	C	2D
ZP1-24	B	C	2D
ZP1-25	B	C	2C
ZP1-26	B	C	2D
ZP1-27	B	C	4A
ZP1-28	B	C	4A
ZP1-29	B	C	2C
ZP1-30	B	C	4A
ZP1-31	B	C	4A
ZP1-32	B	C	3B
ZP1-33	B	C	3B
ZP1-38	B	C	4A
ZP1-46	B	C	3B
ZP1-49	B	C	1A
ZP3-17	B	C	1E
ZP3-18	B	C	2D
ZP3-19	B	C	1E
ZP3-20	B	C	2D
ZP4-18	B	C	2B
ZP4-23	B	C	2B
ZP4-24	B	C	2B
ZP4-25	B	C	1C
ZP6-10	B	C	3D
ZP7601	B	C	1D
ZP7602	B	C	2B
ZPG1	A	D	2A
ZPG2	A	D	3A
ZPG3	A	D	2E
ZPG4	A	D	1D
ZPG5	A	D	3B
ZPG6	A	D	1B
ZPG7	A	D	1A
ZPG8	A	D	1A
ZPG9	A	D	1A

4.26 LCD BL CIRCUIT BOARD

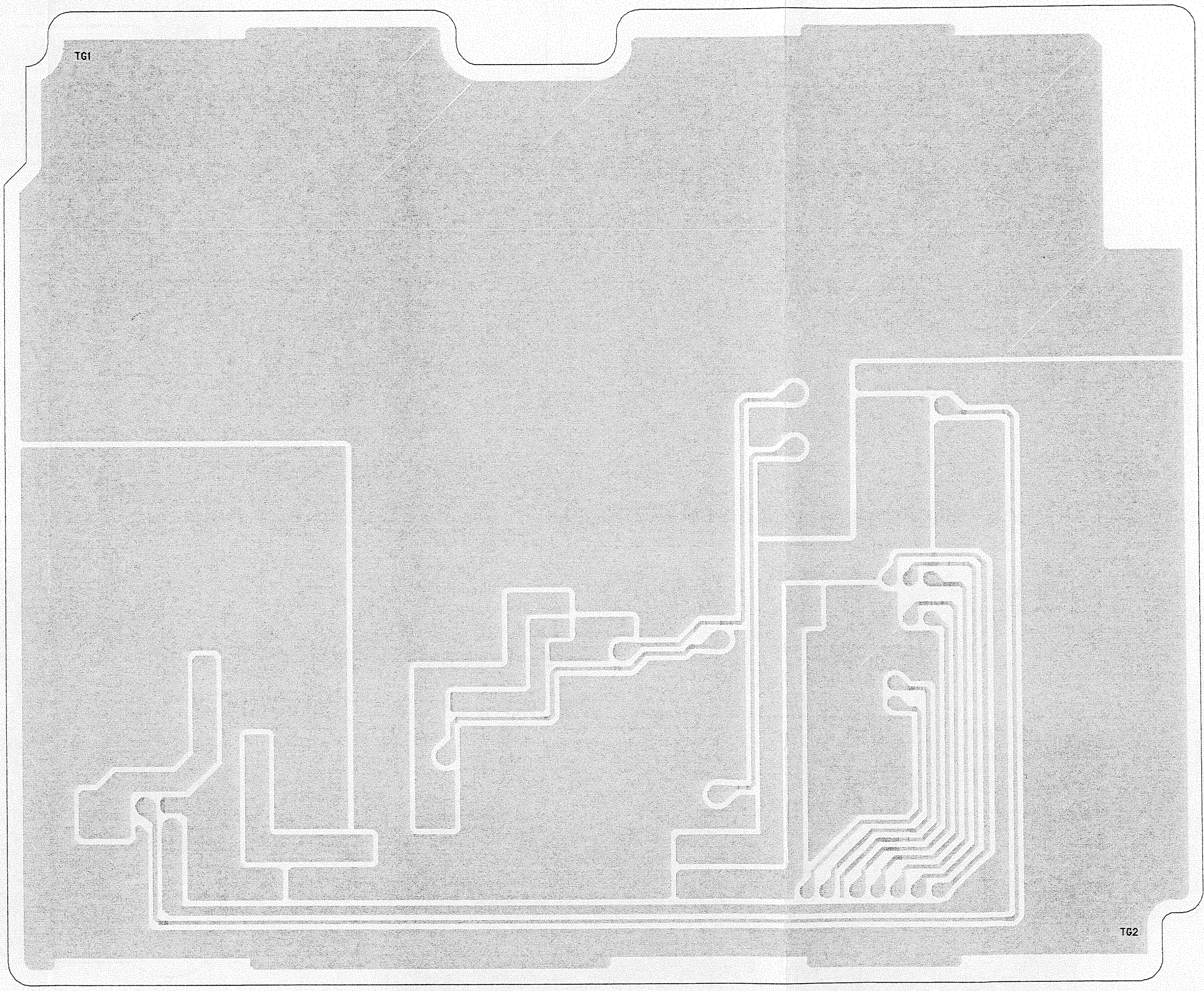
03 LCD BL PWB
YB10325

FOIL SIDE(B)


TG3
CAUTION HIGH VOLTAGE
BANKIN
ZP1-1
F
T7501
C7501
ZP3-1
CN753
ZP3-2
ZP1-3
R7507
R7506
ZP1-6
ZP1-7
CN751
R7502
C7504
R7501
R7509
R7510
0.375A
F7501
F751
0.2A
L751
ZP4-5
CN754
Q7501
C7503
Q7502
C7508
ZP4-1
R751
ZP1-4
L752
IC751
L7502
L7501
D751
C753
C754
CN752
TG4
1
24

COMPONENT SIDE(A)

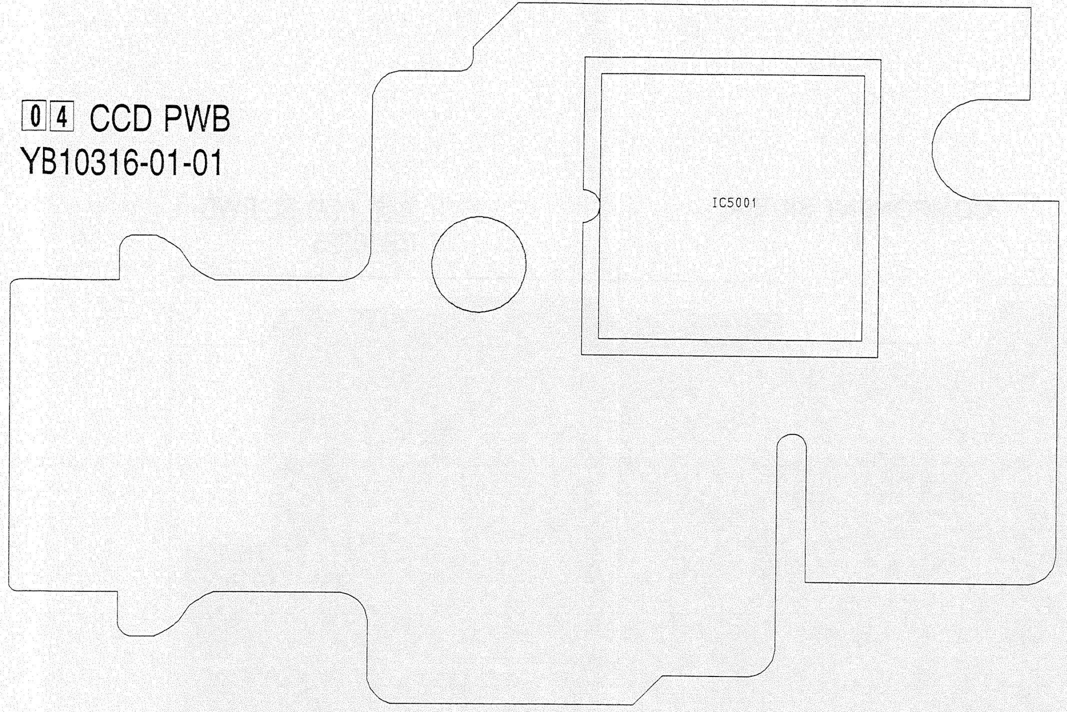
03 LCD BL PWB
YB10325



4.27 CCD AND JUNCTION CIRCUIT BOARDS

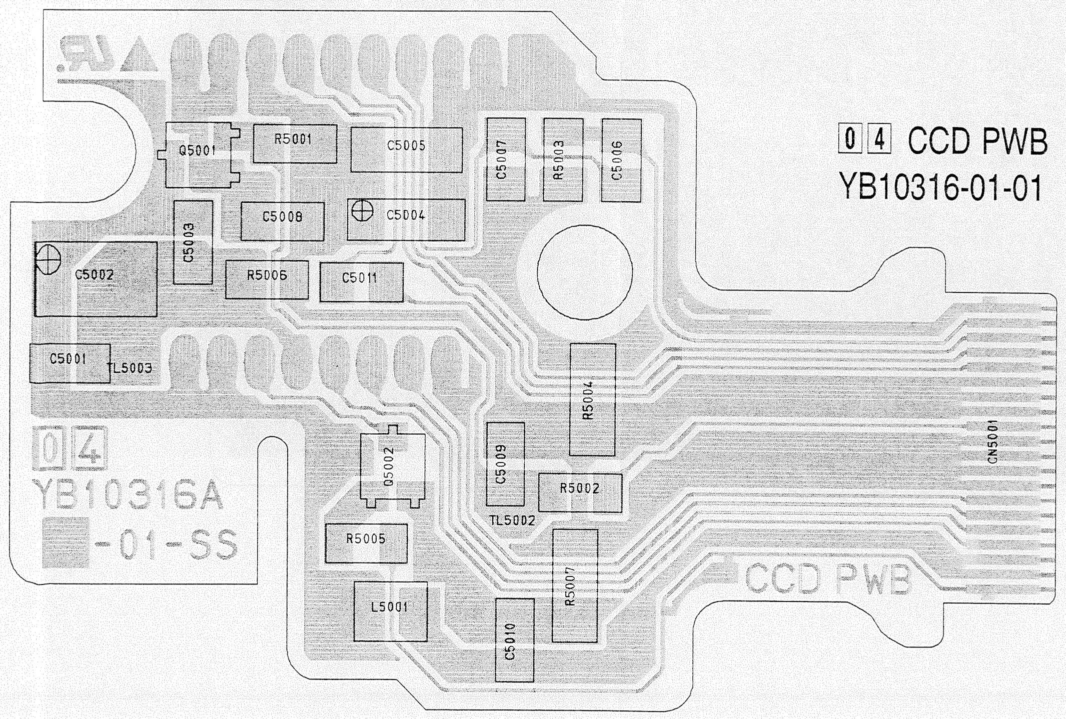
—CCD—

FOIL SIDE(B)



04 CCD PWB
YB10316-01-01

COMPONENT SIDE(A)

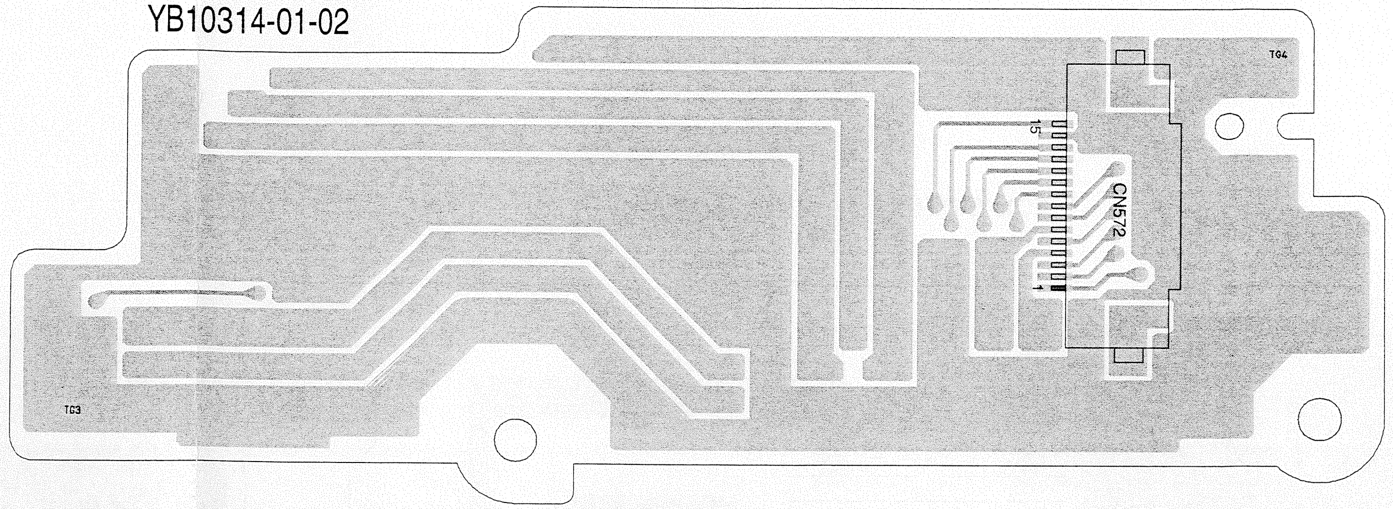

Q5001
R5001
C5005
C5007
R5003
C5006
C5003
C5008
C5004
C5002
R5006
C5011
C5001
TL5003
R5004
CN5001
Q5002
C5009
R5002
TL5002
R5005
R5007
L5001
C5010
04
YB10316A
-01-SS
CCD PWB

04 CCD PWB
YB10316-01-01

—JUNCTION—

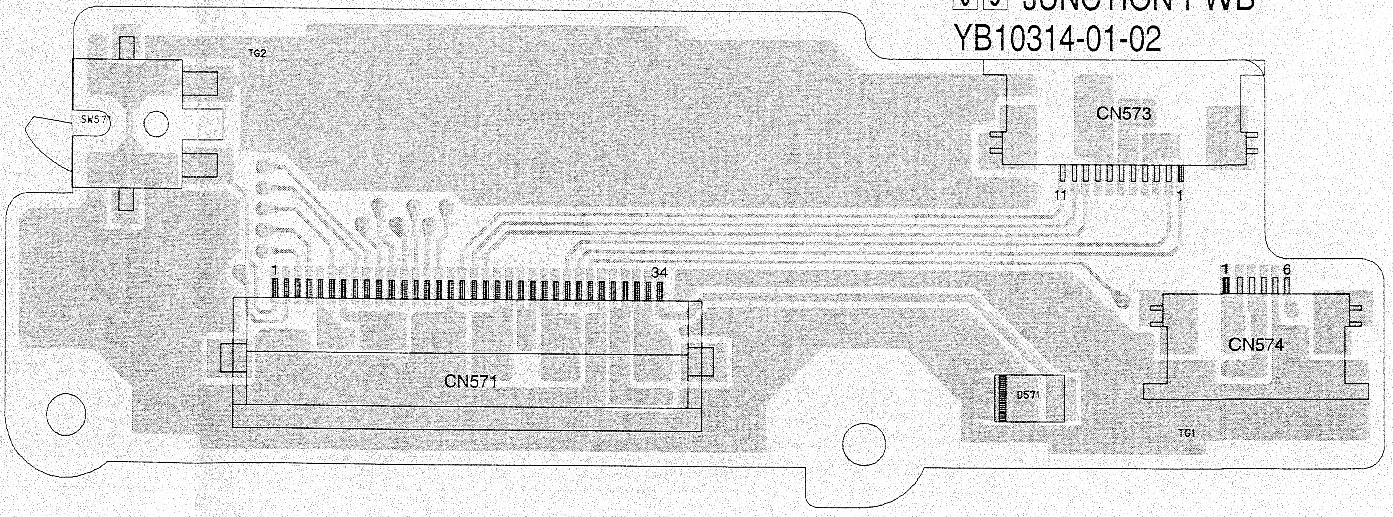
05 JUNCTION PWB
YB10314-01-02

FOIL SIDE(B)


TG4
15
CN572
1
TG3

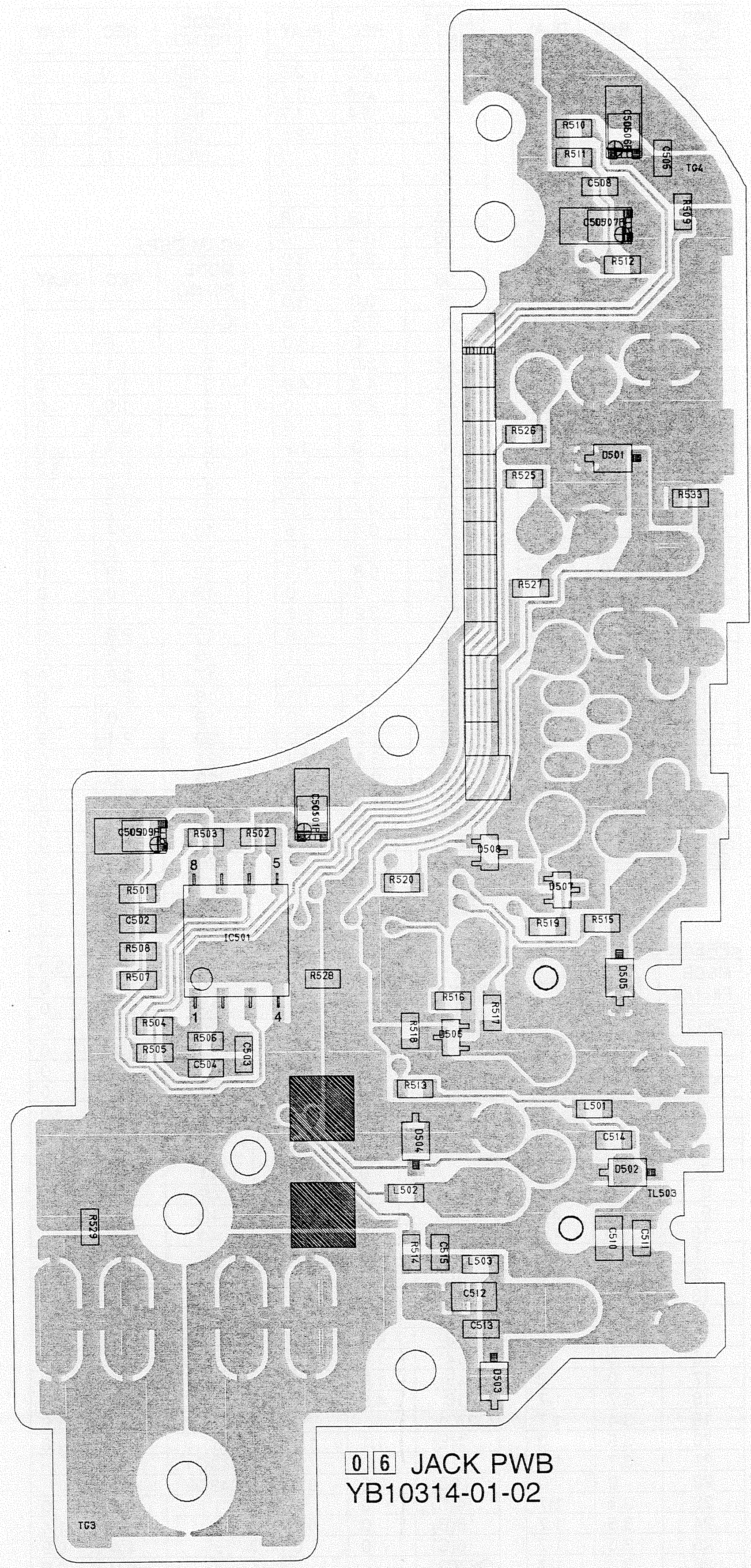
COMPONENT SIDE(A)

05 JUNCTION PWB
YB10314-01-02


TG2
SW571
CN573
11
1
1
34
1
6
CN574
CN571
D571
TG1

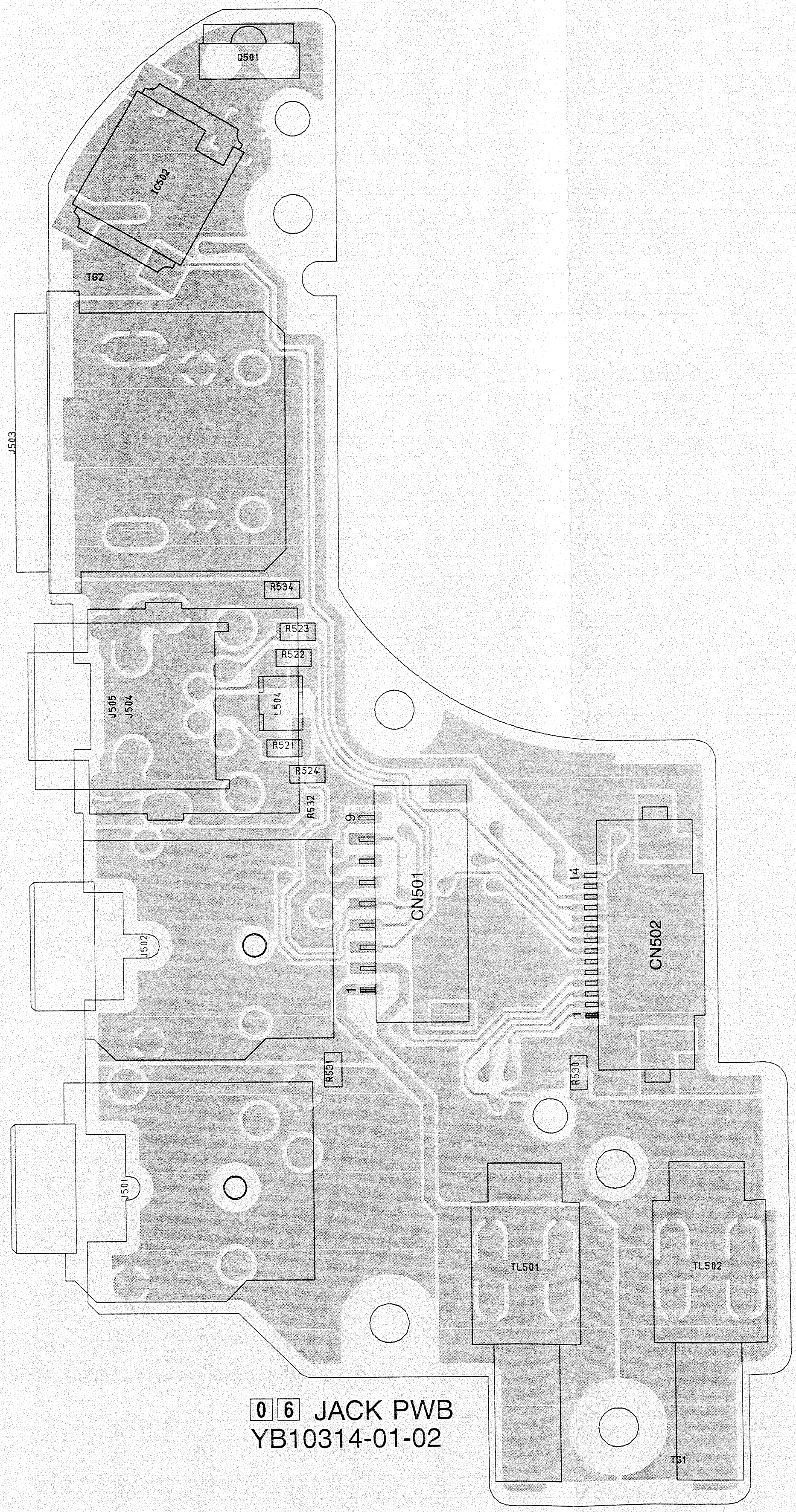
4.28 JACK CIRCUIT BOARD

FOIL SIDE(B)


R510
R511
C506
C508
C507
R512
TG4
R526
D501
R525
R533
R527
C509
R503
R502
8
5
R501
C502
R508
R507
IC501
1
4
R504
R505
R506
C504
C503
R528
R520
D508
D507
R519
R515
D505
R516
R517
R518
D506
R513
L501
C514
D504
D502
TL503
L502
R529
R514
C515
L503
C510
C511
C512
C513
D503
TG3

0 6 JACK PWB
YB10314-01-02

COMPONENT SIDE(A)


Q501
IC502
TG2
J503
R534
R523
R522
L504
R521
R524
R532
J505
J504
9
1
CN501
14
CN502
J502
R531
R530
J501
TL501
TL502
TG1

0 6 JACK PWB
YB10314-01-02

4.29 VOLTAGE CHARTS

<SYSCON>

MODE PIN NO.	REC	PLAY
IC1001	-	-
IC1002		
1	0	0
2	3.0	3.0
3	1.5	1.5
4	0	0
5	2.9	2.9
6	0.5	0.5
7	0.5	0.5
8	3.1	3.1
IC1003		
1	3.0	3.0
2	0.7	0.7
3	2.9	3.0
4	0	0
5	0.6	0.7
6	3.0	3.0
7	2.9	2.9
8	2.9	2.9
IC1004		
1	1.4	1.4
2	0	0
3	1.3	1.3
4	0	0
5	3.0	3.0
IC1005		
1	0	0
2	3.0	3.0
3	0	0
4	3.0	3.0
5	3.0	3.0
IC1006		
1	2.7	2.7
2	0.5	0.5
3	0	0
4	3.0	3.0
5	3.0	3.0
6	3.0	3.0
7	1.3	1.3
8	1.4	1.4
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2.9	2.9
20	2.7	2.7
IC1007		
1	3.0	3.0
2	3.0	3.0
3	3.0	3.0
4	3.0	3.0
5	3.0	3.0
6	3.0	3.0
7	0	0
8	3.0	3.0
9	3.0	3.0
10	3.0	3.0
11	1.3	1.3
12	1.5	1.5
13	3.0	3.0
14	3.0	3.0
IC1009		
1	0	0
2	0	0
3	3.0	3.0
4	3.0	3.0
Q1001		
E	0	0
C	0	0
B	0	0
Q1002		
E	0	0
C	3.0	3.0
B	0.6	0.6
Q1003		
E	0	0
C	0.5	0.5
B	0	0
Q1004		
E	3.1	3.1
C	0	0
B	3.1	3.1
Q1005		
E	0	0
C	3.1	3.1
B	0	0
Q1006		
E	2.9	0
C	2.9	0
B	0	3.0
Q1007		
E	0	0
C	0	3.0
B	3.1	0

<PC IF>

MODE PIN NO.	REC	PLAY
IC1301	-	-
IC1302	-	-
IC1303		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	3.0	3.0
IC1304		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	3.0	3.0
Q1301		
E	0	0
C	0	0
B	0	0

<VTR CPU>

MODE PIN NO.	REC	PLAY
IC1401	-	-
IC1402	-	-
IC1404		
1	-	-
2	2.9	2.9
3	-	-
4	0	0
5	-	-
6	0	0
7	-	-
8	2.9	2.9
Q1401		
1	3.0	3.0
2	3.0	3.0
3	3.0	3.0
Q1402		
1(E)	0	0
2(B)	3.0	3.0
3(E)	3.0	3.0
4(C)	2.7	2.7
5(C)	0	0
Q1403		
1(E)	0	0
2(B)	0	0
3(E)	3.0	3.0
4(C)	0	0
5(C)	3.0	3.0
Q1404		
1	0	0
2	0	0
3	3.0	3.0

<MDA>

MODE PIN NO.	REC	PLAY
IC1601		
1	0	0
2	0.8	0.8
3	0.8	0
4	0	0
5	0.8	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	4.7	4.7
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0.4	0.4
21	0	0
22	0	0
23	0.9	0.9
24	11.0	11.0
25	1.5	1.5
26	0	0
27	1.5	1.5
28	1.5	1.5
29	1.5	1.5
30	1.5	1.5
31	1.5	1.5
32	1.5	1.5
33	1.4	0
34	1.4	0
35	0	0
36	2.9	2.9
37	0	0
38	0.6	0.6
39	0	0.6
40	0	1.2
41	1.5	0
42	0.5	0.7
43	2.9	2.9
44	0	0
45	0	0
46	0	0
47	0.9	2.9
48	0	0
49	2.9	2.9
50	1.9	1.9
51	0	0
52	1.6	1.6
53	0	1.1
54	0.4	0.7
55	0.6	0.6
56	0.7	0.7
57	1.0	1.0
58	0.6	0.6
59	0	0
60	1.0	1.0
61	2.6	0
62	0	1.2
63	0	1.5
64	0	1.5
65	0	1.4
66	0	0
67	0	1.5
68	0.4	0
69	0	0
70	0	0.8
71	0	0.8
72	0	0.8
73	0.8	0
74	1.1	0
75	0	0
76	0	0
77	0	0
78	0	1.7
79	0	0
80	0	0
Q1601		
1(E)	0	0
2(B)	0	0
3(E)	4.8	4.8
4(C)	0	0
5(C)	4.8	4.8

<AUDIO>

MODE PIN NO.	REC	PLAY
IC2001		
1	2.0	2.0
2	2.0	2.0
3	2.0	2.0
4	2.0	2.0
5	1.5	1.5
6	1.5	1.5
7	1.5	1.5
8	0	0
9	3.0	3.0
10	1.5	1.5
11	1.5	1.5
12	1.5	1.5
13	1.5	1.5
14	1.5	1.5
15	1.5	1.5
16	1.5	1.5
17	1.5	1.5
18	1.5	0
19	1.5	2.3
20	2.3	2.3
21	1.5	1.4
22	2.3	2.3
23	2.3	2.3
24	4.7	4.7
25	2.3	2.3
26	0	0
27	2.9	2.9
28	0	0
29	1.5	1.5
30	1.5	1.5
31	1.5	1.7
32	2.9	1.7
33	3.0	3.0
34	1.5	1.5
35	1.5	1.5
36	1.5	1.5
37	3.0	3.1
38	2.4	3.1
39	0	0
40	2.4	2.4
41	0	0
42	0	0
43	4.8	4.8
44	1.5	1.5
45	2.0	2.0
46	2.0	2.0
47	2.0	2.0
48	2.0	2.0
49	2.0	2.0
50	2.0	2.0
51	2.0	2.0
52	2.6	2.6
53	2.0	2.0
54	2.0	2.0
55	4.0	4.0
56	2.0	2.0
57	0	0
58	4.0	4.0
59	2.0	2.0
60	2.0	2.0
61	2.0	2.0
62	2.0	2.0
63	2.0	2.0
64	2.0	2.0
Q2001		
1(E)	0	0
2(B)	0	0
3(C)	0	0
4(E)	0	0
5(B)	0	0
6(C)	0	0
Q2002		
E	4.1	4.1
C	4.8	4.8
B	4.7	4.7
Q2004		
E	0	0
C	0	0
B	0.7	0.7

<DV MAIN/1394PHY>

MODE PIN NO.	REC	PLAY
IC3001	-	-
IC3002		
1	3.0	3.0
2	1.2	1.2
3	1.1	1.1
4	1.1	1.1
5	1.1	1.1
6	3.0	3.0
7	1.4	1.4
8	1.2	1.2
9	1.3	1.3
10	1.4	1.4
11	0	0
12	-	-
13	-	-
14	-	-
15	0	0
16	0	0
17	2.2	2.2
18	1.2	1.0
19	0	0
20	0	0
21	1.5	1.5
22	1.5	1.5
23	1.5	0
24	1.5	1.5
25	3.0	3.0
26	0	0
27	1.4	1.4
28	1.5	1.5
29	1.4	1.4
30	0	1.4
31	1.4	0
32	1.4	1.4
33	2.1	2.1
34	0	0
35	2.0	2.0
36	0	0
37	-	-
38	-	-
39	-	-
40	0	0
41	1.2	1.2
42	1.2	0
43	1.2	1.2
44	1.2	1.2
45	0	0
46	0	1.2
47	0	1.2
48	1.2	1.2
49	0	1.4
50	0	0
IC3005		
1	0	1.0
2	1.0	1.0
3	0	0
4	1.0	1.0
5	2.2	2.2
IC3007		
1	0	1.8
2	1.6	0
3	0	0
4	1.8	0.8
5	1.8	1.8
IC3101		
1	0	3.0
2	3.0	3.0
3	0	0
4	3.0	3.0
5	3.0	3.0
6	3.0	3.0
7	3.0	3.0
8	0	0
9	0	1.4
10	0	0
11	0	0.5
12	0	0.5
13	0	0.5
14	0	0.4
15	0	0.5
16	0	0
17	0	0
18	0	0
19	3.0	3.0
20	3.0	3.0
21	3.0	3.0
22	3.0	3.0
23	0	0
24	3.0	3.0
25	3.0	3.0
26	0	0
27	0	3.0
28	0	0
29	0	0
30	0	0
31	3.0	3.0
32	0	0
33	0	0
34	0	0
35	0.7	0.7
36	0.7	0.7
37	0	0
38	0	0
39	0.7	0.7
40	0.7	0
41	0	0
42	0	0
43	0	0
44	0	1.8
45	0	0
46	0	0
47	0	0
48	0	1.9
49	0	0
50	0	0
51	3.0	3.0
52	0	0
53	0	0
54	0	3.0
55	3.0	3.0
56	0	0
57	0	0
58	3.0	0
59	0	0
60	0	0.6
61	0	0
62	0.7	0.4
63	0	0
64	0	0

<DVEQ/DVANA>

MODE PIN NO.	REC	PLAY
IC3201	-	-
IC3202		
1	2.7	1.3
2	0	3.0
3	0	0
4	3.0	0
5	3.0	3.0
IC3301		
1	0	1.2
2	2.1	1.2
3	0	1.5
4	0	0
5	0	1.7
6	1.0	1.0
7	0	1.8
8	0	1.0
9	0	0
10	0	0
11	0	0
12	0	0
13	3.0	3.0
14	3.0	3.0
15	2.2	2.0
16	3.0	3.0
17	0	1.2
18	0	1.4
19	0	0
20	0	1.4
21	0.7	1.6
22	0.7	1.6
23	3.0	3.0
24	3.0	3.0
25	3.0	0
26	3.0	3.0
27	0	0
28	0	0
29	0	0
30	2.1	0
31	0	0
32	2.1	2.1
33	0	0
34	2.0	2.0
35	1.7	1.5
36	0	1.5
37	2.2	0
38	0	1.5
39	0	0
40	0	0
41	0	0
42	0	0
43	1.5	1.5
44	1.2	0
45	1.0	1.0
46	0.6	0
47	1.2	1.2
48	1.8	1.8
49	1.2	1.2
50	0	0
51	0	0
52	0	0
53	0	0
54	1.5	1.5
55	3.0	3.0
56	3.0	3.0
57	3.0	3.0
58	3.0	3.0
59	1.2	1.2
60	2.5	2.5
61	0	1.5
62	2.5	2.5
63	2.0	2.0
64	0.4	0
Q3551	-	-
Q3552	-	-

<PRE/REC>

MODE PIN NO.	REC	PLAY
IC3501		
1	0	0
2	1.1	1.1
3	0	0
4	0	0
5	0	2.5
6	3.3	0
7	1.4	0
8	0	0
9	1.6	3.0
10	0	1.6
11	3.0	0
12	0	0
13	4.8	4.8
14	0	0
15	0	0
16	0	0
17	0	0
18	3.7	1.7
19	3.4	1.7
20	3.5	0
21	3.7	1.7
22	0	0
23	3.7	1.7
24	3.5	1.7
25	3.5	1.7
26	3.7	1.7
27	0	0
28	2.3	2.5
29	3.4	1.7
30	3.4	1.7
31	2.4	2.5
32	0	0
33	0	0
34	0	0
35	1.8	1.8
36	0.4	0
37	3.0	3.0
38	0	3.0
39	3.0	3.0
40	1.5	1.5
41	0	3.0
42	3.0	0
43	4.8	4.8
44	2.9	0
45	0	0
46	0	1.9
47	0	2.0
48	4.7	3.0
49	4.4	2.8
50	0.4	1.6
51	1.2	1.2
52	0.8	1.5
53	0	0
54	3.2	2.6
55	2.5	1.9
56	1.1	1.1
57	2.5	1.9
58	2.5	1.3
59	0	0
60	1.2	1.2
61	3.4	1.9
62	2.5	1.9
63	2.5	1.3
64	2.5	1.9
Q3501	-	-
Q3502	-	-
Q303	-	-
Q3504	-	-

<V OUT>

MODE PIN NO.	REC	PLAY
IC3701		
1	0	0
2	2.3	2.3
3	0	0
4	0	0
5	0	0
6	0	0
7	1.9	1.9
8	0	0
9	2.3	2.3
10	0	0
11	2.0	2.0
12	2.2	2.2
13	4.8	4.8
14	1.8	1.8
15	1.9	1.9
16	4.8	4.8
Q3701		
1(E)	1.1	1.1
2(E)	1.2	0
3(B)	0.6	0.6
4(C)	0	0
5(B)	0	0.5
6(C)	0	0
Q3702		
1(E)	0	0
2(B)	0	0
3(C)	0	0
4(E)	4.7	0
5(B)	4.7	4.8
6(C)	0	0

<CAM DSP>

MODE PIN NO.	REC	PLAY
IC4201		
1	0	0
2	1.1	0
3	1.1	0
4	1.0	0
5	0.7	0
6	0.7	0
7	2.2	3.0
8	0.5	0
9	0.7	0
10	0.4	0
11	0	0
12	0	0
13	0	0
14	0	0
15	2.9	3.0
16	1.2	0
17	2.8	0
18	2.1	0
19	0	0
20	2.4	0
21	0	0
22	0	0
23	3.0	0
24	0	0
25	0	0
26	1.9	0
27	1.4	0
28	1.9	0
29	2.1	0
30	0	0
31	3.0	3.0
32	1.9	0
33	0.9	0
34	1.4	0
35	1.2	0
36	0	0
37	0	0
38	3.0	3.0
39	0	0
40	0	0
41	3.0	3.0
42	0	0
43	3.0	3.0
44	3.0	0
45	0	1.5
46	3.0	3.0
47	0	0
48	0	0
IC4202		
1	4.8	4.8
2	0	0
3	1.2	1.2
4	3.0	3.0
5	4.8	4.8
IC4301	-	-
IC4302		
1	0	0
2	0	1.4
3	1.4	0.9
4	0.9	0.9
5	0.9	0.9

MODE PIN NO.	REC	PLAY
6	0.9	0.9
7	0.8	0.8
8	1.2	1.2
9	1.2	1.3
10	1.8	1.9
11	1.0	1.1
12	1.2	1.0
13	1.2	1.1
14	1.3	1.1
15	1.3	1.4
16	0	0
17	2.7	2.6
18	2.9	2.9
19	0	3.0
20	0	0
21	3.0	3.0
22	2.7	2.7
23	2.7	2.7
24	0	0
25	1.3	1.5
26	1.5	1.4
27	1.4	1.3
28	1.3	1.3
29	1.2	1.2
30	1.8	1.8
31	1.5	1.5
32	1.4	1.3
33	1.1	1.1
34	1.2	1.3
35	1.1	0
36	1.1	1.2
37	1.6	1.6
38	0	0
IC4304	-	-
Q4301		
1(E)	0.9	0.9
2(E)	0.9	0.9
3(B)	0	0
4(C)	0	0
5(B)	0	0
6(C)	0	0
Q4302		
1(E)	1.2	1.2
2(E)	0	0.9
3(B)	0	0
4(C)	0	0
5(B)	0.6	0.6
6(C)	0	0

<OP DRIVE>

MODE PIN NO.	REC	PLAY
IC4802		
1	2.9	2.9
2	2.6	2.6
3	2.6	2.6
4	0	0
5	2.6	2.6
6	2.6	2.6
7	2.6	2.6
8	4.7	4.7
IC4803		
1	1.0	1.0
2	0	0
3	0	0
4	0	0
5	2.6	2.6
6	2.6	2.6
7	2.4	3.3

MODE PIN NO.	REC	PLAY
8	4.7	4.8
IC4804		
1	2.2	0
2	2.4	3.0
3	2.4	2.9
4	0	0
5	1.8	3.0
6	1.8	3.0
7	1.2	0
8	4.7	4.8
IC4806		
1	2.4	3.0
2	2.4	3.0
3	2.4	3.0
4	0	0
5	3.0	3.0
6	0.6	0
7	0.6	0
8	3.0	3.0
IC4851		
1	0	0
2	0.6	0.6
3	0	0.4
4	0.4	0
5	0	0.4
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	0	0
21	0.7	0
22	0	0
23	4.8	4.8
24	0	0
25	0	0
26	0	0
27	4.8	4.8
28	0	0
29	0	0
30	0	0
31	3.0	3.0
32	0	0
33	0	0
34	1.3	1.5
35	3.0	3.0
36	1.4	1.4
37	1.4	1.4
38	3.1	3.1
Q4801		
E	0	0
C	2.3	2.3
B	1.0	1.0
Q4851		
E	0	0
C	3.8	3.8
B	0	0

<TG/VDRV>

MODE PIN NO.	REC	PLAY
IC5501		
1	-0.5	-0.7
2	2.4	0
3	2.9	0
4	2.9	2.9
5	0	0
6	2.9	2.9
7	0	0
8	0.5	0
9	0	0
10	2.9	2.9
11	1.4	0
12	2.9	2.9
13	0	0
14	1.2	0
15	0	0
16	2.9	2.9
17	2.2	0
18	2.2	0
19	2.2	0
20	0	0
21	0	0
22	0	0
23	0	0
24	2.9	2.9
25	1.3	0
26	3.0	3.0
27	0	0
28	1.2	1.8
29	0	0
30	1.3	1.5
31	0	0
32	0	0
33	2.9	2.9
34	1.5	0
35	1.2	0
36	2.9	0
37	2.9	0
38	3.0	3.0
39	0	0
40	0	0
41	-6.3	0
42	0	11.9
43	11.9	11.9
44	-6.2	11.9
45	-6.6	-6.7
46	-6.6	0
47	0	0
48	2.9	0

<REG>

MODE PIN NO.	REC	PLAY
IC6001		
1	8.0	8.0
2	10.4	10.4
3	0	0
4	0	0
IC6101		
1	3.1	3.1
2	3.1	3.1
3	3.1	3.1
4	1.5	1.5
5	3.1	3.1
6	0	0
7	1.3	1.3
8	11.0	11.0
9	1.0	1.0
10	1.2	1.2
11	2.1	2.1

MODE PIN NO.	REC	PLAY
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2.2	2.2
20	0.9	0.9
21	0	0
22	2.2	2.2
23	1.0	1.0
24	0.6	0.6
25	1.0	1.0
26	0.5	0.5
27	1.0	1.0
28	0.8	0.8
29	1.0	1.0
30	0.9	0.9
31	0	0
32	0	0
33	0.5	0.5
34	0	0
35	0	0
36	0.5	0.5
37	0.8	0.8
38	0	0
39	1.0	1.0
40	0	0
41	2.4	2.4
42	1.1	1.1
43	0	0
44	2.1	2.1
45	2.1	2.1
46	2.1	2.1
47	8	8
48	1.0	1.0
49	1.1	1.1
50	2.1	2.1
51	11.0	11.0
52	0	0
53	10.2	10.2
54	9.4	9.4
55	4.7	4.7
56	6.1	6.1
57	9.3	9.3
58	7.9	7.9
59	0	0
60	11.0	11.0
61	0	0
62	10.3	10.3
63	1.3	1.3
64	1.0	1.0
Q6001		
E	0	0
C	0	0
B	3.0	3.0
Q6002		
D	10.4	10.4
S	0	0
G	0	0
Q6003		
D	0	0
S	4.1	4.1
G	0	3.1
Q6004		
E	11.0	11.0
C	3.0	3.0
B	10.4	10.4
Q6101		
D	0	0
S	0	0
G	0	0
Q6102		

MODE PIN NO.	REC	PLAY
D	0	0
S	0	0
G	3.0	3.0
Q6201		
D	3.0	3.0
S	11.0	11.0
G	7.9	7.9
Q6202		
E	0	3.0
C	2.5	2.5
B	2.3	2.3
Q6203		
1(D)	1.8	1.8
2(D)	1.8	1.8
3(G)	9.3	9.3
4(S)	11.0	11.0
5(D)	1.8	1.8
6(D)	1.8	1.8
Q6204		
D	4.8	4.8
S	11.0	11.0
G	6.2	6.2
Q6205		
E	4.8	4.8
C	0	0
B	4.8	4.8
Q6206		
E	0	0
C	4.8	4.8
B	0	0
Q6207		
E	0	0
C	4.8	4.8
B	0	0
Q6208		
1(D)	1.7	1.7
2(D)	1.7	1.7
3(G)	9.4	9.4
4(S)	11.0	11.0
5(D)	1.7	1.7
6(D)	1.7	1.7
Q6210		
1(D)	0.9	0.9
2(D)	0.9	0.9
3(G)	10.2	0
4(S)	11.0	11.0
5(D)	0.9	0.9
6(D)	0.9	0
Q6211		
D	0	0
S	11.0	11.0
G	4.7	4.7
Q6212		
1(E)	4.3	4.3
2(B)	4.8	4.8
3(C)	15.0	15.0
4(E)	0	4.3
5(B)	5.0	4.9
6(C)	14.4	14.4
Q6213		
E	15.0	15.0
C	11.9	11.9
B	14.4	14.4
Q6214		
E	0	0
C	15.0	15.0
B	0	-1.1
Q6215		
1(E)	-6.0	-6.1
2(B)	-6.5	-6.6
3(C)	-15.3	-15.3
4(E)	-6.1	-6.1
5(B)	-6.6	-6.7
6(C)	-13.3	-15.2

MODE PIN NO.	REC	PLAY
Q6216		
E	-13.9	-15.3
C	-6.6	-6.7
B	-13.9	-15.2
Q6217		
1(E)	0	0
2(B)	0	0
3(C)	0	0
4(E)	0	11.0
5(B)	11.0	11.0
6(C)	11.0	11.0
Q6701		
1(D)	0	0
2(D)	0	0
3(G)	11.0	11.0
4(S)	11.0	11.0
5(D)	0	0
6(D)	0	0

<JACK>

MODE PIN NO.	REC	PLAY
IC501		
1	1.9	1.9
2	1.9	1.9
3	1.9	1.9
4	0	0
5	1.9	1.9
6	1.9	1.9
7	1.4	1.4
8	4.8	4.8
IC502		
1	0	0
2	0	0
3	4.8	4.8
4	4.8	4.8
Q501		
E	0	0
C	4.2	4.2
B	-	-

<VF>

MODE PIN NO.	REC	PLAY
IC7101	-	-
Q7101	-	-

<MONITOR>

MODE PIN NO.	EE
IC7601	
1	0
2	7.1
3	2.4
4	2.4
5	2.4
6	2.4
7	2.4
8	2.4
9	2.4
10	0
11	0
12	5.9
13	0
14	6.0
15	6.0
16	6.0
17	6.0
18	6.0
19	6.0
20	1.7
21	1.4
22	0
23	1.2
24	0.4
25	0
26	1.1
27	0.9
28	1.3
29	2.9
30	1.1
31	0
32	0.5
33	0
34	0
35	0
36	3.0
37	0
38	0
39	3.0
40	0.9
41	1.5
42	2.9
43	2.9
44	0
45	2.9
46	2.7
47	2.4
48	0
IC7602	
1	11.8
2	0.5
3	0.5
4	0
5	4.8
6	4.8
7	7.1
8	11.9
IC7603	
1	0.7
2	3.1
3	0
4	3.0

MODE PIN NO.	EE
5	3.0
6	0.7
7	0
8	0
IC7604	
1	1.0
2	3.0
3	2.3
4	1.0
5	3.1
6	0
7	0
8	0
9	1.0
10	0
11	0
12	1.0
13	0
14	3.0
Q7601	
E	-9.1
C	0
B	-8.6
Q7602	
E	0
C	0
B	-8.5
Q7603	
E	-8.6
C	0
B	-8.2
Q7604	
E	-8.6
C	-14.7
B	-9.1
Q7608	
E	0
C	0
B	3.1
Q7609	
E	0
C	4.7
B	0
Q7610	
E	4.8
C	1.4
B	4.7

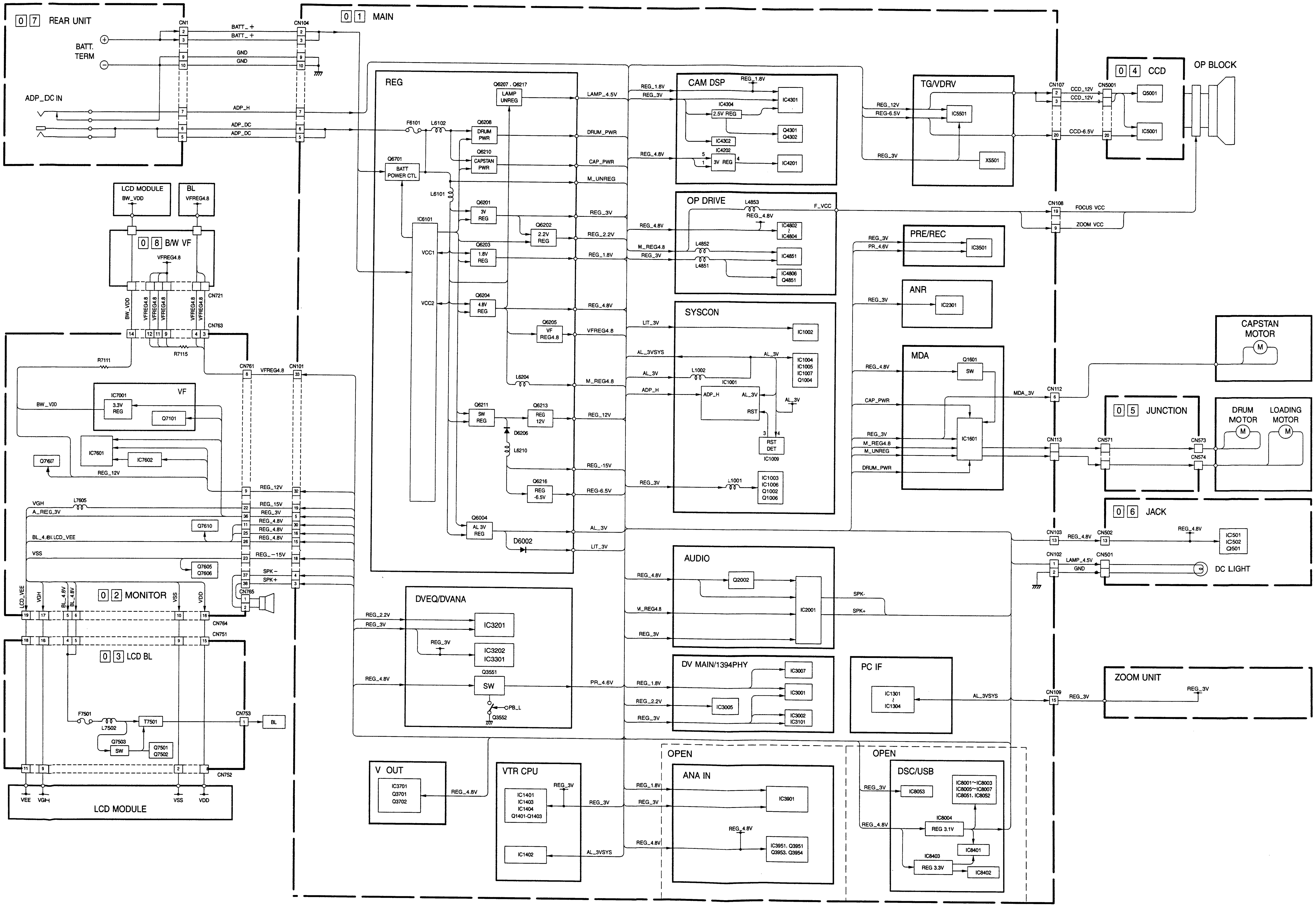
<LCD BL>

MODE PIN NO.	EE
Q7501	
E	0
C	4.5
B	0.4
Q7502	
E	0
C	4.5
B	0.4
Q7503	
E	4.6
C	0
B	0
Q7504	
E	0
C	0
B	0.7

<CCD>

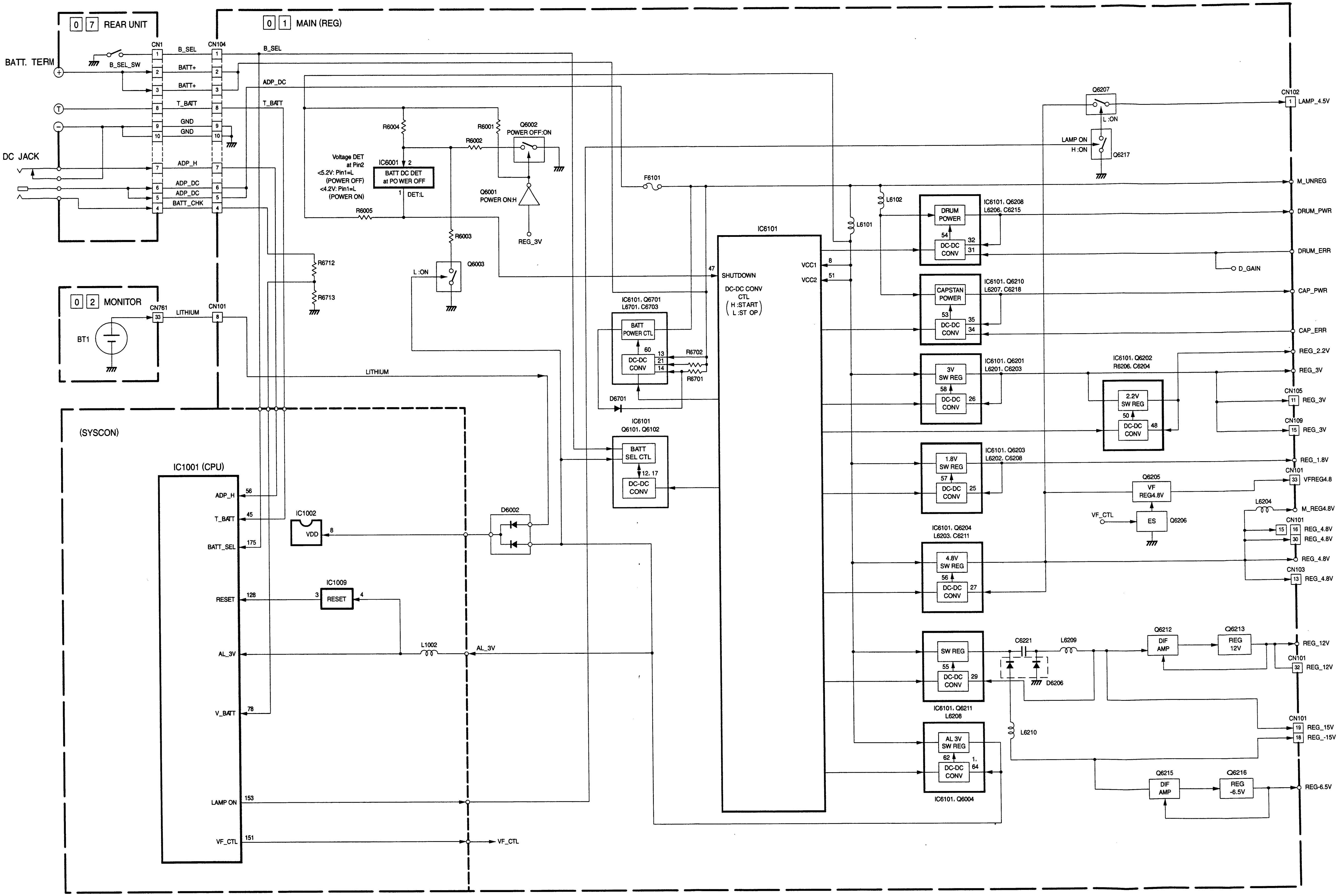
MODE PIN NO.	EE
Q5001	
E	0
C	8.1
B	0

4.30 POWER SYSTEM BLOCK DIAGRAM

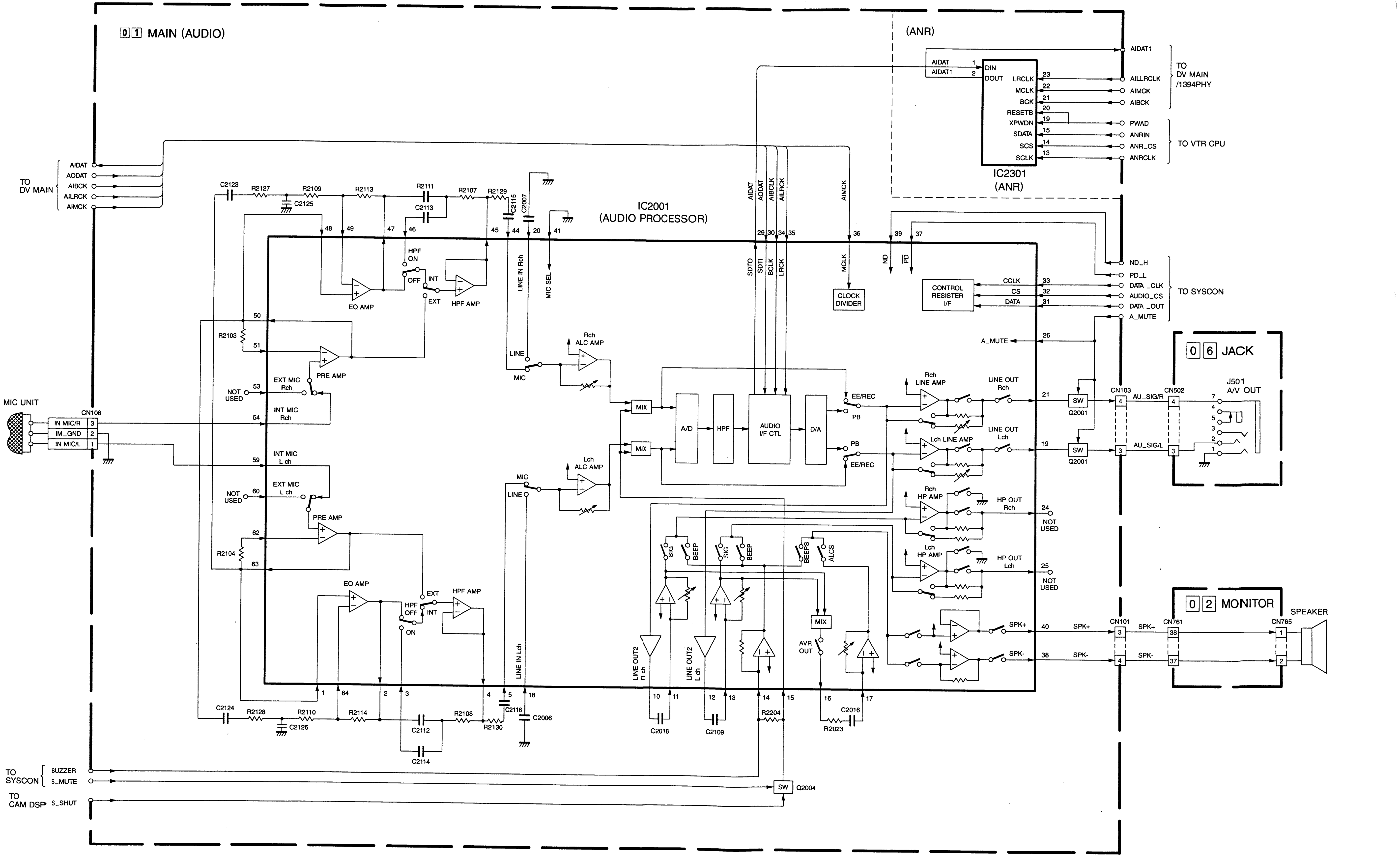


07 REAR UNIT
BATT. TERM
ADP_DC IN
CN1
CN104
BATT_+
GND
ADP_H
ADP_DC
01 MAIN
REG
Q6207, Q6217 LAMP UNREG
F6101
L6102
Q6208 DRUM PWR
Q6210 CAPSTAN PWR
Q6701 BATT POWER CTL
L6101
Q6201 3V REG
IC6101
Q6202 2.2V REG
Q6203 1.8V REG
VCC1
VCC2
Q6204 4.8V REG
Q6205 VF REG4.8
L6204
Q6211 SW REG
Q6213 REG 12V
D6206
L6210
Q6216 REG -6.5V
Q6004 AL 3V REG
D6002
LAMP_4.5V
DRUM_PWR
CAP_PWR
M_UNREG
REG_3V
REG_2.2V
REG_1.8V
REG_4.8V
VFREG4.8
M_REG4.8
REG_12V
REG_-15V
REG-6.5V
AL_3V
LIT_3V
CAM DSP
REG_1.8V
IC4301
IC4304
2.5V REG
Q4301 Q4302
IC4302
IC4202
3V REG
IC4201
OP DRIVE
L4853
F_VCC
IC4802 ~ IC4804
L4852
L4851
IC4851
IC4806 Q4851
SYSCON
LIT_3V
IC1002
AL_3VSYS
IC1004 IC1005 IC1007 Q1004
L1002
IC1001
ADP_H
AL_3V
RST
RST DET
IC1009
L1001
IC1003 IC1006 Q1002 Q1006
TG/VDRV
REG_12V
REG-6.5V
IC5501
X5501
PRE/REC
PR_4.6V
IC3501
ANR
IC2301
MDA
Q1601 SW
IC1601
MDA_3V
REG4.8
M_UNREG
CN107
CN5001
CCD_12V
CCD-6.5V
04 CCD
Q5001
IC5001
OP BLOCK
CN108
FOCUS VCC
ZOOM VCC
CAPSTAN MOTOR
CN112
CN113
CN571
CN573
CN574
05 JUNCTION
DRUM MOTOR
LOADING MOTOR
06 JACK
CN103
CN502
IC501 IC502 Q501
CN102
CN501
LAMP_4.5V
DC LIGHT
AUDIO
Q2002
IC2001
SPK-
SPK+
DVEQ/DVANA
IC3201
IC3202 IC3301
Q3551 SW
PB_L
Q3552
PR_4.6V
DV MAIN/1394PHY
IC3007
IC3001
IC3005
IC3002 IC3101
PC IF
IC1301 ~ IC1304
ZOOM UNIT
CN109
V OUT
IC3701 Q3701 Q3702
VTR CPU
IC1401 IC1403 IC1404 Q1401-Q1403
IC1402
AL_3VSYS
OPEN
ANA IN
IC3901
IC3951, Q3951 Q3953, Q3954
OPEN
DSC/USB
IC8053
IC8001~IC8003 IC8005~IC8007 IC8051, IC8052
IC8004 REG 3.1V
IC8401
IC8403 REG 3.3V
IC8402
LCD MODULE
BW_VDD
BL
VFREG4.8
08 B/W VF
CN721
CN763
R7111
R7115
CN761
CN101
VF
IC7001 3.3V REG
Q7101
IC7601
IC7602
Q7607
REG_12V
VGH
L7605
A_REG_3V
Q7610
BL_4.8V, LCD_VEE
VSS
REG_15V
REG_-15V
Q7605 Q7606
SPK-
SPK+
CN765
02 MONITOR
LCD_VEE
BL_4.8V
VDD
CN764
CN751
03 LCD BL
F7501
L7502
T7501
Q7503 SW
Q7501 Q7502
CN753
CN752
LCD MODULE
VEE

4.31 REGULATOR SYSTEM BLOCK DIAGRAM


0 7 REAR UNIT
0 1 MAIN (REG)
0 2 MONITOR
(SYSCON)
BATT. TERM
DC JACK
B_SEL_SW
CN1
CN104
B_SEL
BATT+
T_BATT
GND
ADP_H
ADP_DC
BATT_CHK
ADP_DC
R6004
R6001
Q6002
POWER OFF:ON
R6002
Voltage DET
at Pin2
<5.2V: Pin1=L
(POWER OFF)
<4.2V: Pin1=L
(POWER ON)
IC6001
BATT DC DET
at POWER OFF
DET:L
Q6001
POWER ON:H
REG_3V
R6005
R6003
Q6003
L :ON
R6712
R6713
BT1
CN761
LITHIUM
CN101
F6101
L6101
L6102
IC6101
SHUTDOWN
DC-DC CONV
CTL
H :START
L :ST OP
VCC1
VCC2
IC6101, Q6701
L6701, C6703
BATT
POWER CTL
DC-DC
CONV
R6702
R6701
D6701
IC6101
Q6101, Q6102
BATT
SEL CTL
DRUM
POWER
IC6101, Q6208
L6206, C6215
CAPSTAN
POWER
IC6101, Q6210
L6207, C6218
3V
SW REG
IC6101, Q6201
L6201, C6203
IC6101, Q6202
R6206, C6204
2.2V
SW REG
1.8V
SW REG
IC6101, Q6203
L6202, C6208
IC6101, Q6204
L6203, C6211
4.8V
SW REG
SW REG
IC6101, Q6211
L6208
C6221
L6209
D6206
L6210
AL 3V
SW REG
IC6101, Q6004
Q6205
VF
REG4.8V
VF_CTL
ES
Q6206
Q6212
DIF
AMP
Q6213
REG
12V
Q6215
Q6216
REG
-6.5V
Q6207
L :ON
LAMP ON
H :ON
Q6217
L6204
CN102
LAMP_4.5V
M_UNREG
DRUM_PWR
DRUM_ERR
D_GAIN
CAP_PWR
CAP_ERR
REG_2.2V
REG_3V
CN105
REG_3V
CN109
REG_3V
REG_1.8V
CN101
VFREG4.8
M_REG4.8V
REG_4.8V
REG_4.8V
REG_4.8V
CN103
REG_4.8V
REG_12V
REG_12V
REG_15V
REG_-15V
REG-6.5V
IC1001 (CPU)
ADP_H
T_BATT
BATT_SEL
RESET
AL_3V
V_BATT
LAMP ON
VF_CTL
IC1002
VDD
IC1009
RESET
L1002
AL_3V
D6002
VF_CTL

4.32 AUDIO SYSTEM BLOCK DIAGRAM



01 MAIN (AUDIO)
(ANR)
IC2301
(ANR)
AIDAT
AIDAT1
DIN
DOUT
LRCLK
MCLK
BCK
RESETB
XPWDN
SDATA
SCS
SCLK
AIDAT1
AILLRCLK
AIMCK
AIBCK
TO DV MAIN /1394PHY
PWAD
ANRIN
ANR_CS
ANRCLK
TO VTR CPU
TO DV MAIN
AIDAT
AODAT
AIBCK
AILRCK
AIMCK
IC2001
(AUDIO PROCESSOR)
C2123
R2127
R2109
C2125
R2113
R2111
C2113
R2107
R2129
C2115
C2007
EQ AMP
HPF ON
OFF
INT
EXT
HPF AMP
LINE IN Rch
MIC SEL
AIDAT
AODAT
AIBCLK
AILRCK
AIMCK
SDTO
SDTI
BCLK
LRCK
MCLK
CLOCK DIVIDER
ND
PD
CONTROL RESISTER I/F
CCLK
CS
DATA
ND_H
PD_L
DATA _CLK
AUDIO_CS
DATA _OUT
A_MUTE
TO SYSCON
A_MUTE
R2103
PRE AMP
EXT MIC Rch
NOT USED
INT MIC Rch
MIC UNIT
CN106
IN MIC/R
IM_GND
IN MIC/L
Rch ALC AMP
LINE
MIC
MIX
A/D
HPF
AUDIO I/F CTL
D/A
EE/REC
PB
Rch LINE AMP
LINE OUT Rch
Lch LINE AMP
LINE OUT Lch
SW
Q2001
CN103
AU_SIG/R
AU_SIG/L
CN502
06 JACK
J501
A/V OUT
INT MIC L ch
EXT MIC L ch
Lch ALC AMP
Rch HP AMP
HP OUT Rch
NOT USED
Lch HP AMP
HP OUT Lch
NOT USED
R2104
SIG
BEEP
BEEPS
ALCS
MIX
AVR OUT
SPK+
SPK-
CN101
CN761
CN765
02 MONITOR
SPEAKER
LINE OUT2 R ch
LINE OUT2 L ch
LINE IN Lch
C2124
R2128
R2110
C2126
R2114
C2112
R2108
R2130
C2116
C2006
C2114
C2018
C2109
R2204
R2023
C2016
TO SYSCON
BUZZER
S_MUTE
TO CAM DSP
S_SHUT
SW
Q2004